User's Guide

ASSA ABLOY

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ARX Access Control System

About ARX Access Control System

ARX access control system is a client/server system for administration and supervision of security modules.

The system architecture is a hierarchical tree-like structure of hardware, logic control units and access areas that makes the system easy to administer and monitor.

ARX Access Control System

ARX access control system is the name of the complete integrated security system built around an advanced module for secure communication together with a modern access control system.

ARX access control system consists of three parts:

- The core of the system is the server software ARX Server, that handles the communication in the system between the hardware and the software.

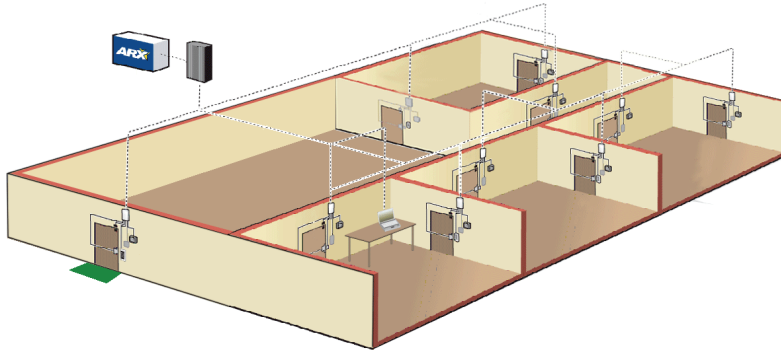
- The second part is the hardware, which controls the doors that controls access cards, door codes and keys according to the your settings made in the software. The system uses secure communication, which for example means that the hardware can function even though a cable has been cut.
- The last part is the ARX Client software, the software this User guide covers. It is used for administrating the ARX control system, that is, controls the access rights the users have.

The ARX Client software offers a large amount of settings. Moreover, there are a number of optional functions such as, *web interface, Entry phones, administration of reservations of training rooms/laundry* or *administration of elevators.*

All functions described in this user guide can be used, as long as the installation is equipped with correct (and valid) licences.

ARX access control system overview

An ARX hardware installation can look as follows:



The following table shows the five main components in the system

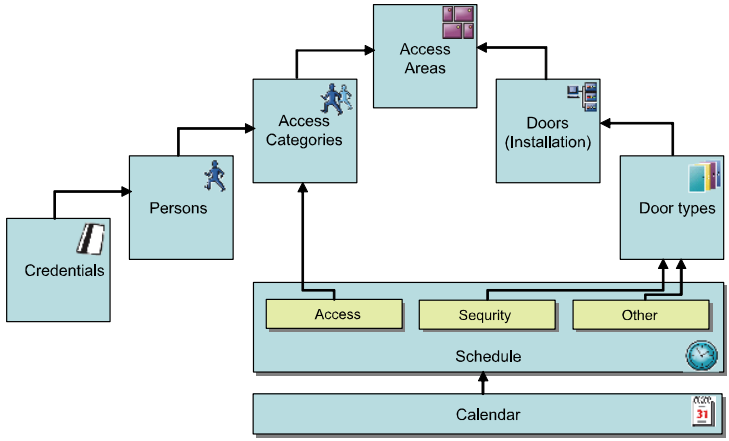
	ARX Server Installed on the company's server and communicates with the doors, their hardware and other applications. Manages the database with all of the information about the system. Communicates with the control units.
	Control units (LCU) Communicates with the ARX Client program server and divides the signal between up to 16 doors. The Control units determine if access should be allowed or not.
	Door control (DAC) These control how every door should function; it opens and closes doors on the command of the control units.
	ARX Client The Administrators software that handles the communication with the ARX Server. All settings for the access control system and its users are performed here.
- - - - - -	**Network** All communication between ARX hardware takes place within the company's existing computer network TCP/IP.

Examples of other components are shown in the following picture:

	Card readers, magnetic contacts, alarm siren.

ARX Access Control System Software

The illustration shows the main functions in the ARX Client software and how they are interconnected. To grant access the dependency chain can not be broken.



The following list describes the various functions of each part:

- **Card**
  The card is stored in the system but only works if it is connected to a person.
- **Persons**
  Here people are added to the system and a cards are connected to them. Access is only permitted if the person belongs to a specific access category.
- **Access categories**
  The various access categories that are needed in the access system are defined here. Access is only given if the access category is designated to a certain access area.

- **Access area**
  All parts of the access system are connected together here. The access areas are defined by a number of doors. Access is given by access categories and access schedules that are connected together and connected to an access area.

- **Doors**
  Doors (Door controls) are connected to the system as they are added to the Installation tree. Access through a door is only allowed if the door is given a door type and added to an access area.

- **Door categories**
  The security level and operating modes are allocated for every door type (using a security schedule and additional schedules).

- **Schedules**
  The *access schedule* controls the access to the access system for different access categories.
  The *security schedule* controls which security solution that is valid for a particular door type at a specified time.
  The *Additional schedules* indicate when the door's different operation modes apply.

- **Calendar**
  The calendar defines which days are holidays, weekends and weekdays.

About this User's Guide

The purpose of this guide is to provide assistance to users of the ARX Client software. The main target audience is users of the access control hardware, or of the entire access control system.

This user's guide is written both as a procedure that takes you through all the ARX Client software operations, and also as a reference where you can look up information about specific functionality whenever necessary.

To fully explain the workflow for different operations, many of the texts in this guide are written in the form of step-by-step instructions.

This guide fully describes all the operations and settings for this software. Not all persons will have sufficient security clearance to use all of the functions described here.

The default user interface in the ARX Client software differs from the interface shown in screenshots in this manual. This is a user setting that can be edited, see section "User interface" on page 33.

Typing conventions

Objects in this software, such as buttons, tabs or menu options, are indicated in the body text using *italics.*

User input, or command line text, is indicated using the `Courier typeface`.

ARX Client software

About ARX Client software

This chapter covers the overview of the ARX Client software and the functions and buttons available. It also describes how licences are added.

Login

When you start the client software, a login window is displayed.

Login window

1. Enter your *User name*, *Password* and select *Server* from the drop down list.
2. Click *OK*.

NOTE! The program is case-sensitive i.e. it differentiates between upper- and lowercase characters. Ensure that the Caps Lock key is not activated.

NOTE! The first time you login on the client software, use the user name master and leave the password field empty.

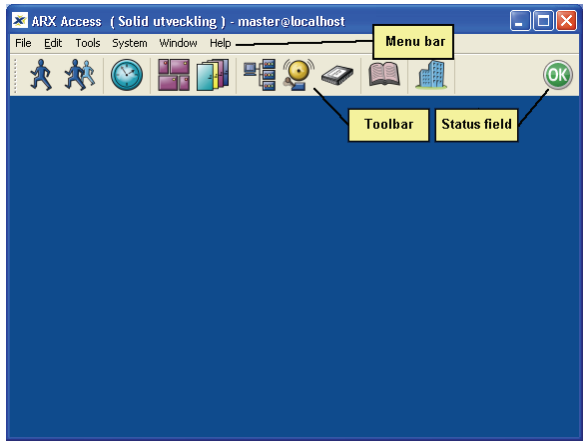
Main Window

The main window of the ARX Client software makes it easy for you to install and build up your access control system, as well as simplifying the daily handling of persons and cards.

The ARX Client Software main window contains different groups of options and information:

- The *Menu bar* gives you access to all operations and options in ARX. Menus are: *File*, *Edit*, *Tools*, *System*, *Window* and *Help*.

- The *Toolbar* provides shortcuts for key operations. See "Toolbar" on page 24.
- *Status field* shows the status of connected controllers. Normally the status field shows a green controller symbol. When information is downloaded to one or more controllers, a yellow controller symbol is shown as long as the download is in progress.



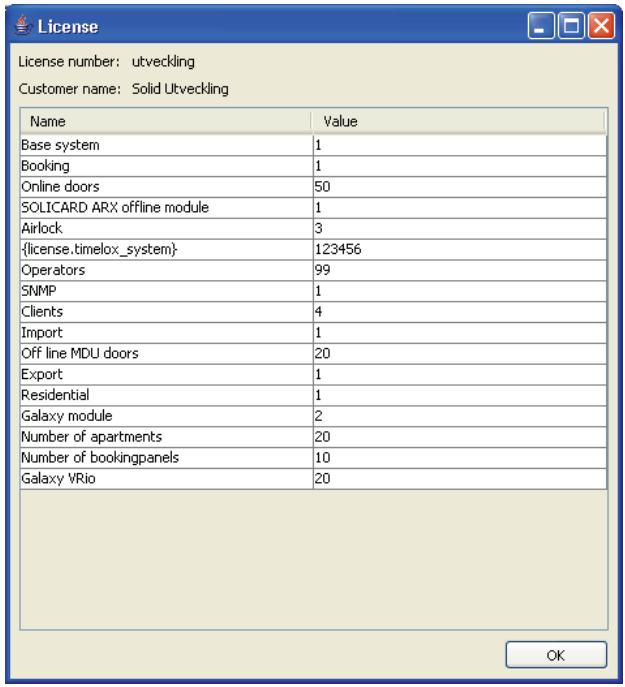
The ARX client software

Licences and options

ARX consists of licence controlled modules. Only the modules that you have a licence for are shown on the programme's menu bar and toolbar. All the modules that require an extra licence are marked with the word option in brackets in this configuration guide.

To check information for licences for ARX, do the following:

1. Select the *System* menu in the main window and click on the *Licence*.
2. In the *Licence* window information about the current licences are shown.



The Licence window

Toolbar

The main window toolbar (example configuration)

To quickly reach commonly used and important functionality in the ARX client software, there are a number of shortcuts in the main window of the program. An explanation of each button follows.

The operator can customize the toolbar and decide if all buttons should be shown or if for example only the buttons that are used most frequently.

Persons

Every person that is to have access in your access system must be registered in the system. The function: manage people and allocate codes, card or key to each person. See section "Persons" on page 39.

Access categories

An access category is a group of persons with the same levels of clearance in your access system, for example caretaker, employee and consultant. See section "Access Categories" on page 72.

Schedules

With the help of the schedule you are able to control the timing of access to your access system and the means of access, for example by card, code or both. See section "Schedules" on page 110.

Access areas

Under access area you determine which doors shall belong to a certain access area. Every access area is allocated specific access categories that are permitted right of entry. This is carried out at the same time as the installation and configuration of the system and is not normally changed during daily administration. See section "Access Areas" on page 125.

Door types

Under door types you define the different types of doors that exist in your access system, with respect to operation modes and level of security. This is carried out at the same time as the installation and configuration of the system. See section "Door types" on page 165.

Installation

At the same time as installation and configuration of the system, you determine how all the doors and other hardware are connected. This is carried out in the main window for installation. See section "Installation" on page 208.

Alarm (option)

With the alarm function you are able to construct alarm zones and integrate the access system with other alarm systems. This is carried out during configuration. See section "Alarm (option)" on page 287.

Logs

Everything that occurs in the access system is saved in a logbook, both changes in the ARX software and all the door accesses. See section "Logs" on page 312.

Firmware

The control units that control all the doors can be updated with new firmware. This is not normally carried out during the daily usage of the system. See section "Firmware" on page 309.

Card receipt templates

In this main window you can create receipts that can be used when codes, cards or keys are handed out to new persons in the system. This is carried out at the same time as installation and configuration of the system and is not normally changed during daily administration. See section "Card Reader User Functionality" on page 402.

Calendar

Here you can determine when weekdays and holidays occur and which exceptions apply for your access system. This is done during configuration. See section "Calendar" on page 319.

Cards/Keys

When new people are added to the system it is possible to give them a card or key as well as an access code if the system is constructed in that way. In this main window you can add new cards and allocate them to a specific person. See section "Credentials" on page 80.

Entry phone (option)

During configuration it is possible to determine which persons/apartments, telephone numbers and card numbers apply for a certain entry phone if you have this option connected to your access system. See section "Entry phone (option)" on page 252.

Messages (option)

Here you decide which texts shall be shown on My pages – which are the users' personal websites. This is carried out during configuration and can also be used if there is a continual need of information for all users. See section "Messages (option)" on page 106.

Apartments (option)

If your access system is for an apartment building or residential area, the rights of access are determined during configuration for every apartment and its proprietors. If the access system also includes, for example, a laundry area, it is possible to control which washing machines can be booked by every apartment. See section "Apartments (option)" on page 351.

Time slots

Whilst configuring the booking function, you are able to decide the templates for each booking period. For example a laundry period shall be for 3 hours, or a conference room can be booked for any number of hours. See section "Time slot templates" on page 378.

Rules templates

In this main window it is possible to decide, during configuration, the rules that apply for all bookable recourses, for example, the number of bookings any one apartment can do per washing machine and month.
Rule templates are then used under the Resource tree when you add the resources (for example washing machines) that exist in the system. See section "Rules" on page 381.

Resource tree

During configuration, all of the bookable units – resources – are defined and structured here, for example, washing machines in an apartment building, or a conference room in an office block. See section "Resources tree" on page 366.

Resource access

In this main window it is possible to connect certain access categories to the bookable resources that are available. For example, which group of persons (access category) has permission to book a certain washing machine or conference room. See section "Resource access" on page 375.

Trigger

In this window you create a "trigger".
A trigger can react on any event in ARX and can perform one or several actions. For example to trip a relay or to send an e-mail. See section "Triggers" on page 176.

Trigger group

In this window you create trigger groups, which is a function that groups triggers with on or several actions. See section "Trigger group" on page 198.

Trigger alarm list

In this window you have an overview of all triggers activated in the system. You can notice and acknowledge the trigger alarms activated. See section "Trigger alarm list" on page 202.

Camera

Here you add surveilance cameras connected to the LAN network to ARX and defines address and settings for the camera. See section "Camera" on page 204.

Show camera

With this function you can view the cameras added in with the Camera function. See section "Show the camera" on page 207.

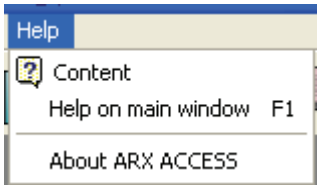
General Tips

Help

The ARX Client software program has built-in online help. Using the online help, users can access support and assistance while they are working with the system.

The online help is accessed via the *Help* menu in the main window, or by pressing the F1-key on the keyboard.

The online help is context-sensitive, which means that it detects which window is open in the client and opens a separate help window which displays the appropriate information for the current window.



Help menu in the main window

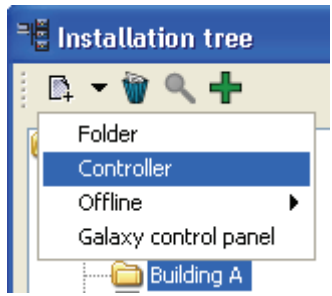
The menu option *Content* opens a help window with a table of contents for all help topics.

The option *About ARX ACCESS* opens a window and displays current information about the program version and copyright notices etc.

Different menu types

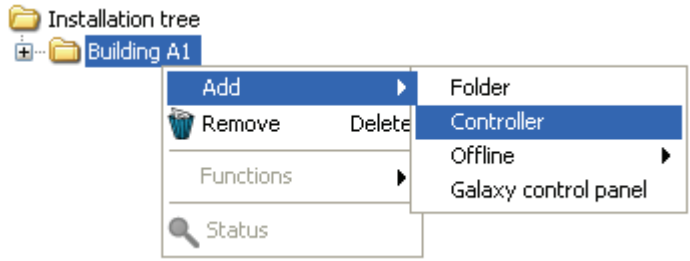
In the ARX client software, you can reach the same menu options in different ways.

One way is to highlight an object, select a menu in the same window, and then select one of the displayed menu options.



Example of a highlighted object (Building A) and the window menu

In some windows (like *Access areas* or *Installation Tree*), you can select an object and then right-click to display the popup menu with related options.

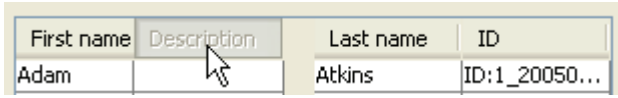


Example of popup menu for a selected object (Building A1) selected with right-click of the mouse button

This manual describes the first method of selecting a menu, but in many cases using the popup menus works exactly the same.

Sort columns

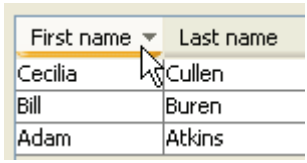
In all windows in the ARX client software that contains lists with columns is it possible rearrange these columns. This is done by grabbing the column header with the mouse cursor and move it to the desired place.



Rearranging columns

Sort lists

In windows where the information is presented in the form of lists you can choose how these lists should be sorted. Choose between ascending or descending order by clicking on the small arrow shown close to the column header in the list.



Sorting in ascending or descending order

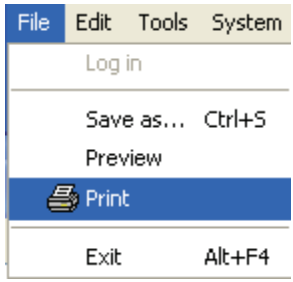
Print reports

From most functions in the ARX client software you can generate and print reports.

It is possible to study a report immediately on screen or print it on paper by using a connected printer.

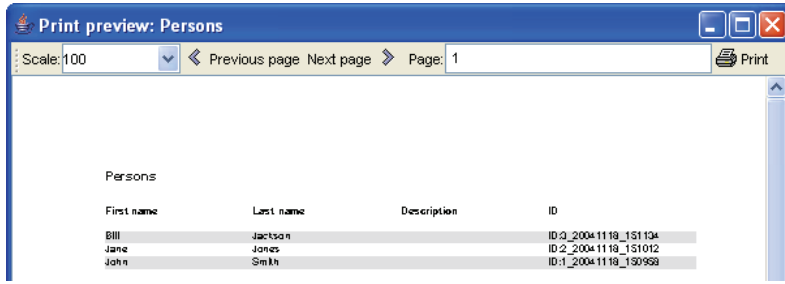
To open a report from any function, do the following:

1. Select *File* menu in the main windows menu bar and select the option *Print*. (Or, press Ctrl+P on the keyboard.)



Menu option to print the active window

2. In the window *Print preview* that is now shown you can choose to study the generated report on screen, or to print the report as paper hard copy.



Upper part of the window Print preview

3. To print the report, click *Print*.
4. The standard system print window opens for selecting the printer.

Saving Files

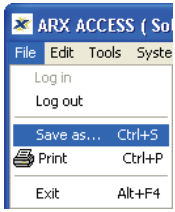
From all functions where the user can generate printed reports is it also possible to save the information as a file.

The saved (or exported) information can be in the following formats:

- XML (*.xml)
- PDF (*.pdf)
- PostScript (*.ps)
- Comma separated file (*.csv)

To save data from any activated window, do the following:

1. Select the *File* menu in the main windows menu bar and select the option *Save as*.



Export menu

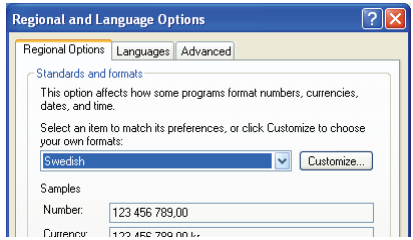
2. Now a *Save* window opens where you will enter a filename and select a file format for the exported information.
3. If you want to save the exported information, click *Save*. If you want to close the window without saving the information, click *Cancel*.

Language

The ARX client software automatically selects the language that the operating system uses.

If the operating systems language setting is not supported by the ARX client software, then English will be used.

In Microsoft® Windows, it is possible to change the language settings for programs by changing a setting in the *Languages* tab that is found under *Control Panel*, *Regional and Language Options*. This may be required if you for example are running an English version of your operating system and want to run the ARX client software in another language.



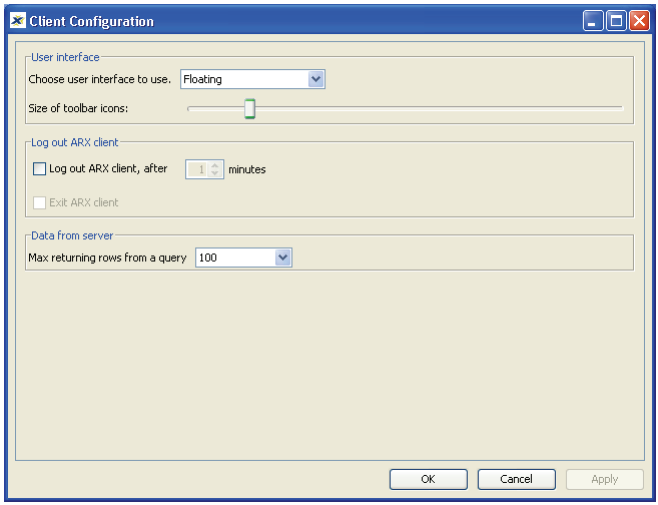
Choose language in the field for standards and formats.

Also choose the default input language. Enter the Language tab and click on *Details* button in the *Text services and input languages.*

Text Services and Input Languages
Settings
Advanced
Default input language
Select one of the installed input languages to use when you start your computer.
English (United Kingdom) - United Kingdom
Installed services
Select the services that you want for each input language shown in the list. Use the Add and Remove buttons to modify this list.
EN
English (United Kingdom)
Keyboard

Choose Standard input language

Client Settings



Window for system configuration settings

User interface

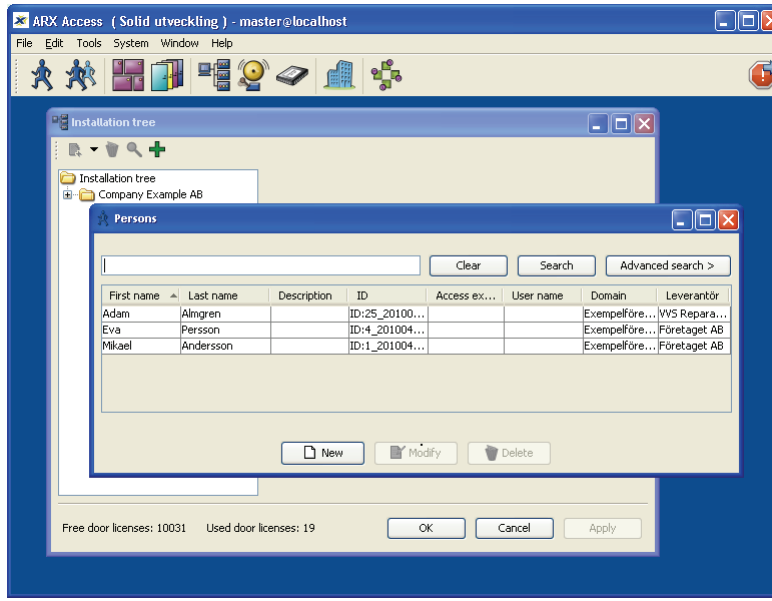
You can choose which user interface ARX uses. There are three display options:

- Floating with background
- Tabbed
- Floating with background

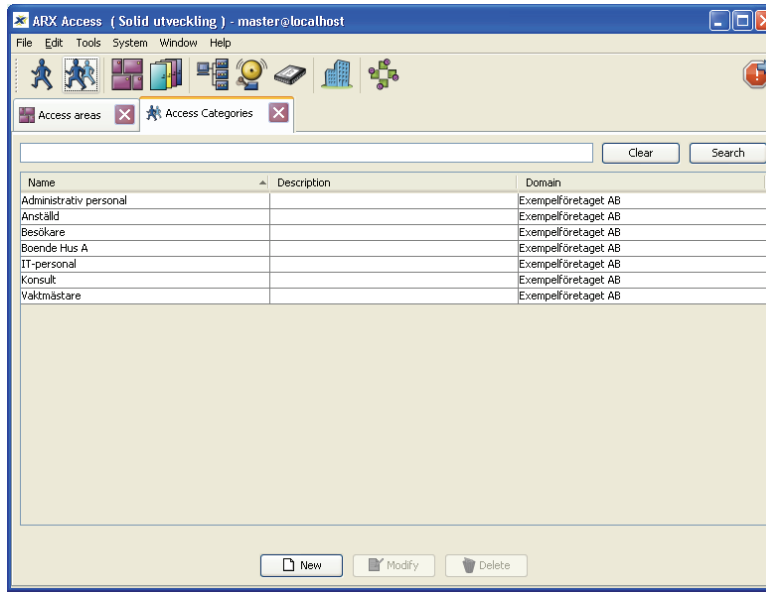
NOTE! If you edit the user interface, the ARX Client Software must restart before the changes take effect.

The appearance of the user interface is also dependent on each user's operating system and its respective settings.

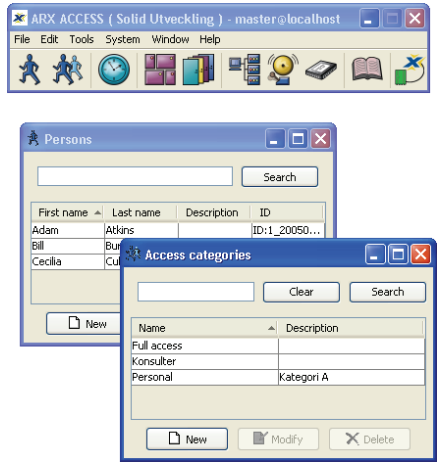
Here are three examples of the different user interfaces:



Example of Floating with background



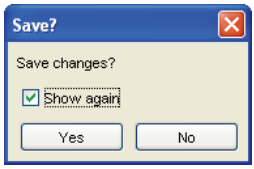
Example of Tabbed user interface



Example of Floating user interface

With the slider *Size of toolbar icons* it is possible for the user to customize the size of the icons in the main window toolbar.

In the field *User interface* is it possible to reset how warnings are displayed. These warnings can, for example, be warning dialogs like *Save changes?*



Example of a warning

If you have previously chosen not to display these warning messages, but want to go back to displaying the messages, check the option *Reset warning messages* and click on the *OK* button.

Lock the ARX Client software

In the field *Lock ARX Client software* a number program settings are shown.

- In order to lock the client after a period of inactivity, check the checkbox *Lock the ARX Client software after*, and choose a number of minutes.
- If you want the client window to be minimized when the client is locked, check the checkbox *Minimise on lock*.
- ARX client software is equipped with a standard lock screen image, but if you want to display another image, click the *Browse* button.
- The lock screen transparency for the selected lock screen image can be set with the *Use transparency* checkbox and the *Lock screen transparency* slider.

Data from server

Under the heading *Data from server* you can define *Max returning rows from a query*. This option makes it possible to limit long listings being displayed from search results, which can speed up the display.

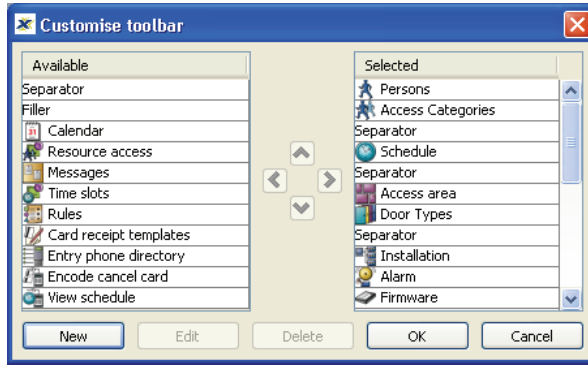
This is mainly desirable for large systems with, for example, a great many persons registered. For such a system, it would be appropriate to show 25 or 50 lines as a result of a search, instead of all results (which could be several thousand!)

NOTE! The choice of maximum returning rows is only valid for the current user and the respective client.

Customise toolbar

With the menu option *Customise toolbar* is it possible for each user to choose which toolbar icons that should be visible in the main window.

When the menu option *Customise* toolbar is selected, a new window with two columns is shown. In the left column the *Available* icons and objects are shown, and to the right the *Selected* objects are shown.



Window Customise toolbar

It is also possible to add icons to other Windows applications or files, by clicking the *New* button. Enter the name and select the path to the application or file that you want to add to the toolbar.

Lock the ARX client software

With the menu option Lock ARX you lock the ARX Client. To unlock the ARX client software, it is required to log in with a valid *Username* and *Password*.

Persons

About Persons

In the ARX client software, you create a person and then attach all other data (e.g. security classes or cards) to that person.

This section is a step-by-step procedure that shows you how to:

- Add, change and remove persons
- Allocate person access to areas and domains (optional feature)
- Attach cards to persons
- Administrate keys with Performer (option)
- Example from the Company Example

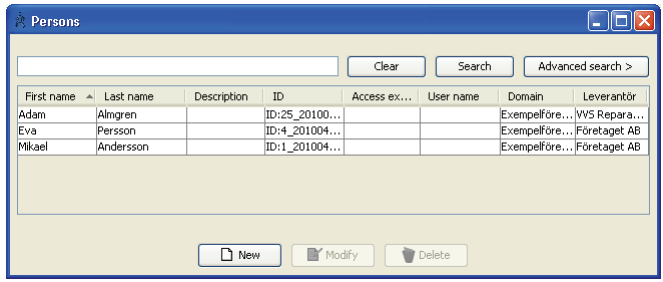
Add a Person

Before you add a new person, it might be advisable to have some details readily available, for example:

- First- and last names
- Description of the person
- ID number (Created automatically by the system if you leave this box empty.)

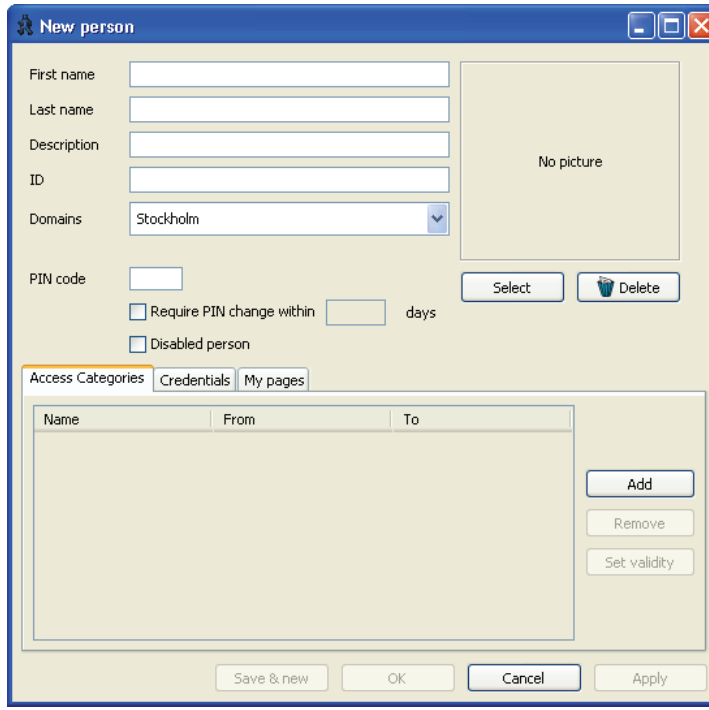
To add a person, do the following:

1. Click the *Persons* button on the toolbar of the main window.



Window with list of persons registered in the system.

2. Click the *New* button at the bottom of the *Persons* window.



Window for new person

3. Enter all personal details in the upper part of the window: *First name, Last name, Description, ID* and *domain* if that optional feature is installed.

   NOTE! If you leave the ID field empty, the system will automatically create a unique ID and attach it to the person. The system also selects the standard domain if no changes are made.

4. If you wish to link a picture for the person, click on *Select* under the picture field in the upper right hand side of the window, and select a picture file in the resulting window.

5. To save your entry and continue with another, click on *Save & new*. To save your entry and close the window, click on

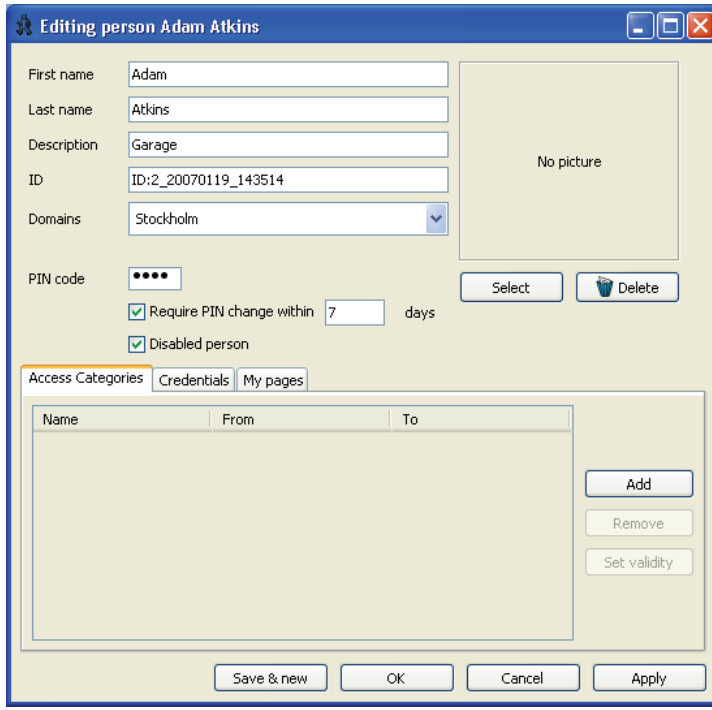
OK. To close the window without saving, click on *Cancel*. Click *Apply* if you want to save the information and at the same time keep the window open.

It is also possible to add more information fields for persons (e.g. Telephone number or Department). This is done with the menu option *System*, *System configuration*.

PIN code

It is also possible to allocate a *PIN code*, set the option *Require PIN change* or allocate *Disabled* privileges for a person.

1. Enter a personal code (PIN).
2. With the checkbox *Require PIN change*, choose if a change of PIN code is required, and if so within how many days.
3. Choose if the person should be granted Disabled privileges with the *Disabled person* checkbox.



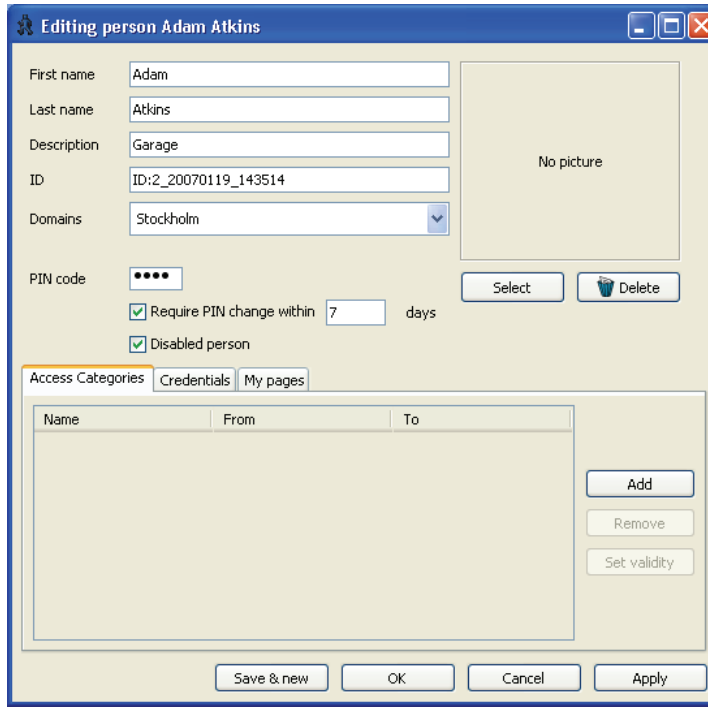
Window for a person, with door privileges

4. To save your entries and continue to add a new person, click *Save & new*. To save your entry and close the window, click on *OK*. To close the window without saving, click on *Cancel*. Click *Apply* if you want to save the information and at the same time keep the window open.

Disabled clearance

The checkbox *Disabled person* gives a person extra time to check in- and out. This means, for example, that the time period elapsing between entering a code and the door unlocking are longer than normal.

1. Select if the person should have *Disabled person access*.



A window for a person with door functions

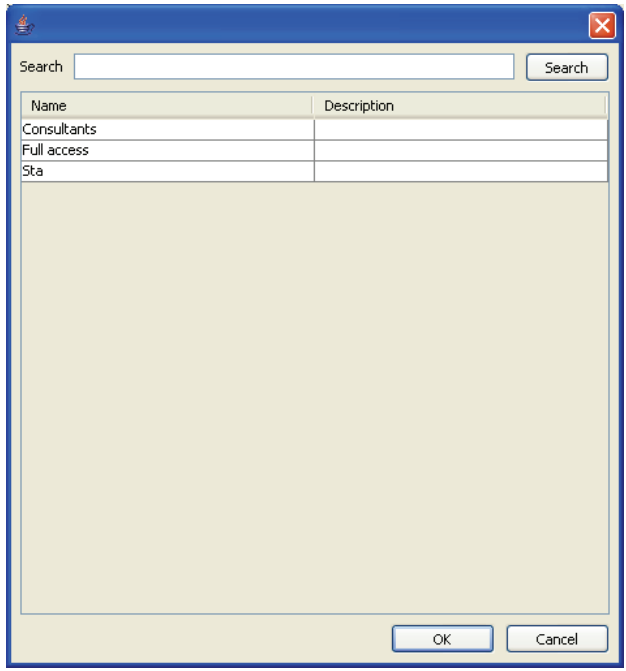
2. Click on *Save & New* if you wish to save the information and add a new person to the system. Click *OK* if you wish to save the information and close the window. Click on *Cancel* if you wish to close the window without saving the information. Click on *Apply* if you wish to save the information and keep the window open at the same time.

Note that in addition to allocating disabled clearance for a person, you must activate the corresponding door mode for each access categories in the area this should apply to. (For more information, see "Access Areas" on page 125.)

Allocate access categories

In the lower part of the window *Editing person*, you will find the *Access categories* tab. Here you attach the current person to one or more access categories.

1. To attach the person to an access category, click the button *Add*.



Window Select category

2. Select one or several categories from the list and click *OK*.
3. To save the details and close the window, click *OK*. To close the window without saving the input, click *Cancel*.

For more information on how to create access categories, see "Access Categories" on page 72.

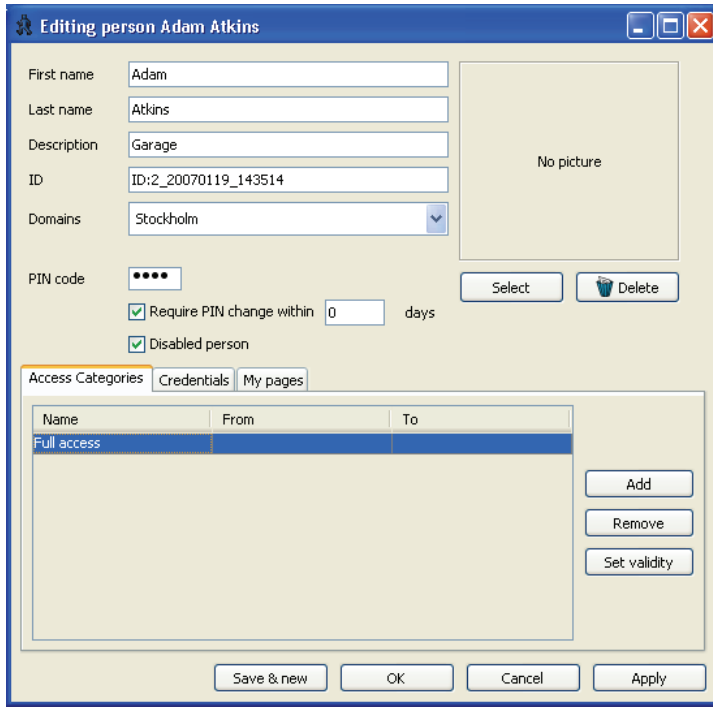
It is also possible to set the default expiry date for an access category. This is done with the *Default validity for access categories* option (in the *System* menu).

Allocate a limited period of validity

The following steps describe how you set a limited period of validity for the access category allocated to a person. For example, this could be applicable to persons who only need to belong to an access category for a limited period of time.

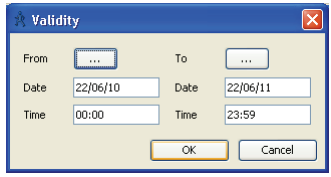
NOTE! If a person is not allocated any limited period of validity (i.e. the access category fields *From* and *To* are empty), this means that the person will always belong to the current access category.

1. Highlight the current access category in the lower part of the *Editing* p*erson* window.



When an access category selected, the Set validity button is activated.

2. Click *Set validity*.



Window for selecting period of validity.

3. In the window that appears, select the start- and end-date using the calendar window that opens when you click on the "…" buttons next to the *From* and *To* fields.

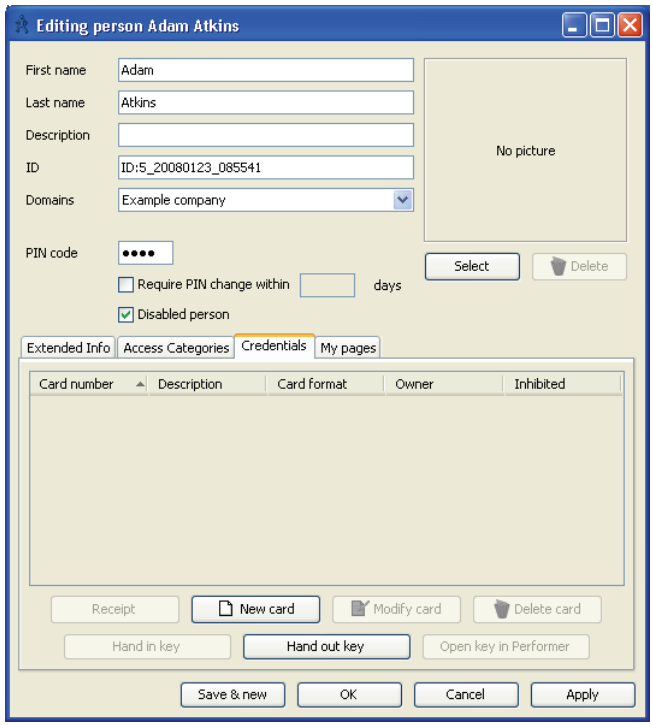
4. Finally, enter the times in the appropriate fields and click *OK*. The period of validity is now displayed in the list of access categories attached to the person.
5. To save the information and continue with a new window, click *Save & new*. To save the information and close the window, click *OK*. To close the window without saving the input, click the *Cancel* button.

Allocate cards

The following steps show you how to attach an access card to a person.

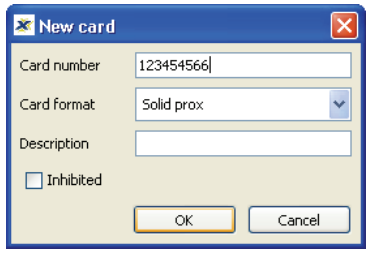
1. To attach a card to a person, click the Cards tab in the lower part of the Editing person window.

   (If you have a PCI-reader simply swipe the card in order to add a card to the person who you are working with.)



Person window with the Cards tab activated.

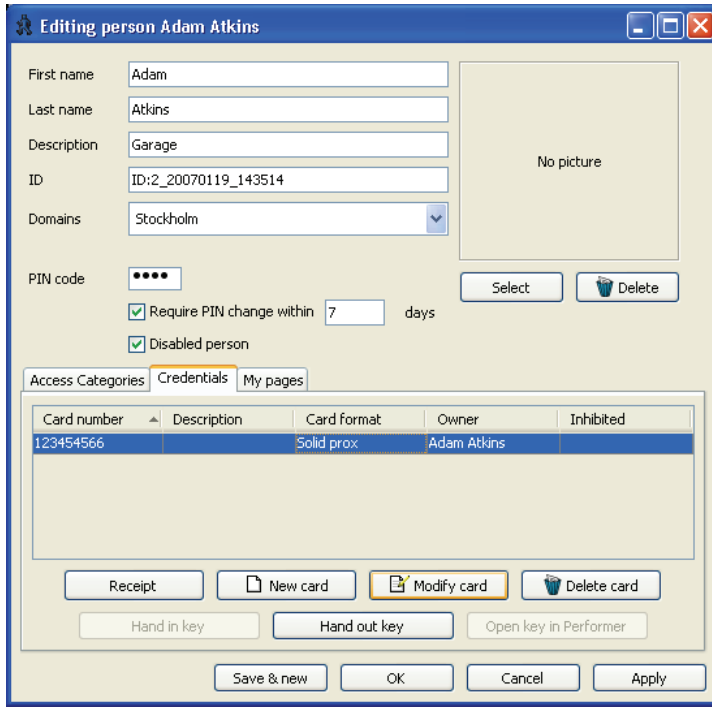
6. Click the *New* button.



Window for a new card

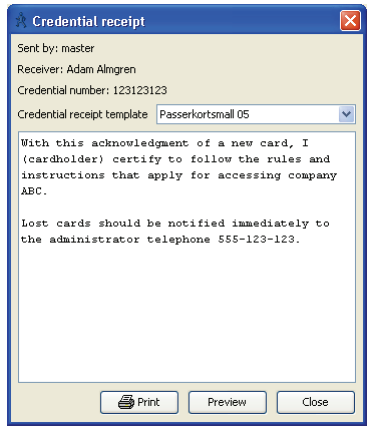
7. In the *New card* window, enter *Card number*, *Card format* and a brief *Description*.
8. To save the information and close the window, click *OK*. To close the window without saving the input, click the *Cancel* button.

The card is now shown in the summary table in the columns *Card number*, *Card format, Owner, Description* and *Inhibited*.



Card allocated to a person.

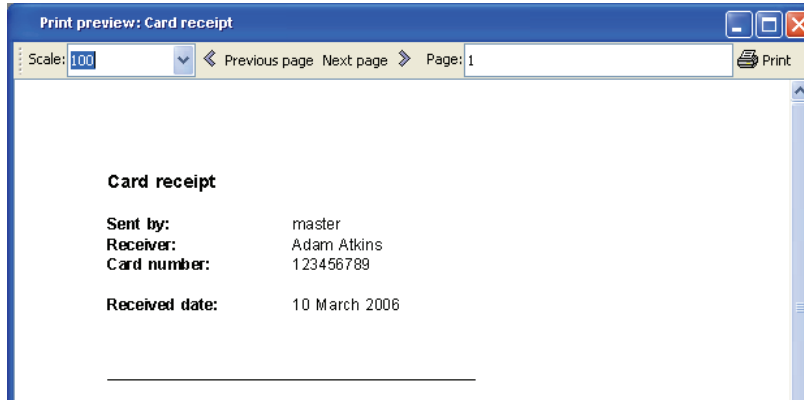
9. It is now possible to print a card receipt and use this to document that the person in question has received the card and signed for it. Click on the button *Receipt* to do this.


Credential receipt
Sent by: master
Receiver: Adam Almgren
Credential number: 123123123
Credential receipt template
Passerkortsmall 05
With this acknowledgment of a new card, I (cardholder) certify to follow the rules and instructions that apply for accessing company ABC.
Lost cards should be notified immediately to the administrator telephone 555-123-123.
Print
Preview
Close

Card receipt window.

10. In the *Card receipt* window that now opens is it possible to choose if a custom card receipt template shall be used. If no template is selected the ARX Client Software standard template *No text* is used.

11. Select the option *Print* in the *File* menu (or, press Ctrl+P on the keyboard).



Example of a card receipt (example with no additional text)

12. To print the card receipt on paper, click *Print* to open a standard window for printer settings.

NOTE! It is possible to create special custom receipt templates. For more information see chapter "Card Receipt Templates" on page 95.

Modify Person Data

At any time, you can add, edit and remove data attached to a person.

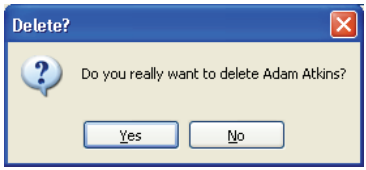
1. Highlight a person in the *Persons* window.
2. Click *Modify*.

See "Add a Person" on page 40 for more information on how to edit and add data.

Remove Person

To remove a person, do as follows:

1. Highlight the appropriate person in the window *Persons*.
2. Click *Delete*.



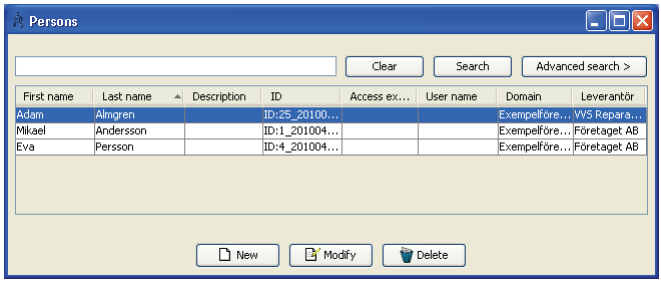
Query dialog Delete person

3. If you are sure that this is the correct person to remove, click *Yes*.

NOTE! When you remove a person, their card or keys will still be in the card list and will no longer work. Therefore all cards affected should be removed before removing the person.

Search for a Person

The search function in the *Persons* window helps you to find one person in a long list of persons.



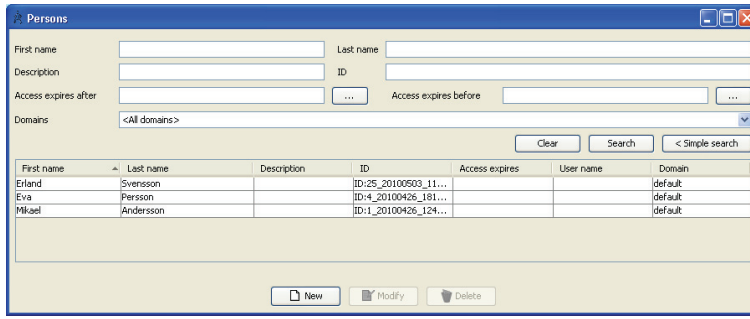
Search field in window Persons

1. Enter a text in the input field. Separate first- and last names with a single blank space. The search function is insensitive to letter case, so you can enter both upper- and lowercase characters.
2. Click *Search*.

This is so called free text searching and all occurrences of matching text strings are now shown in the list of persons.

Advanced search

By pressing the *Advanced Search* button the following window opens:



Advanced search in window Persons

Enter text in desired input fields and click *Search.*

The more fields that are completed, the more refined search will be performed.

Administrate keys (requires the Performer option)

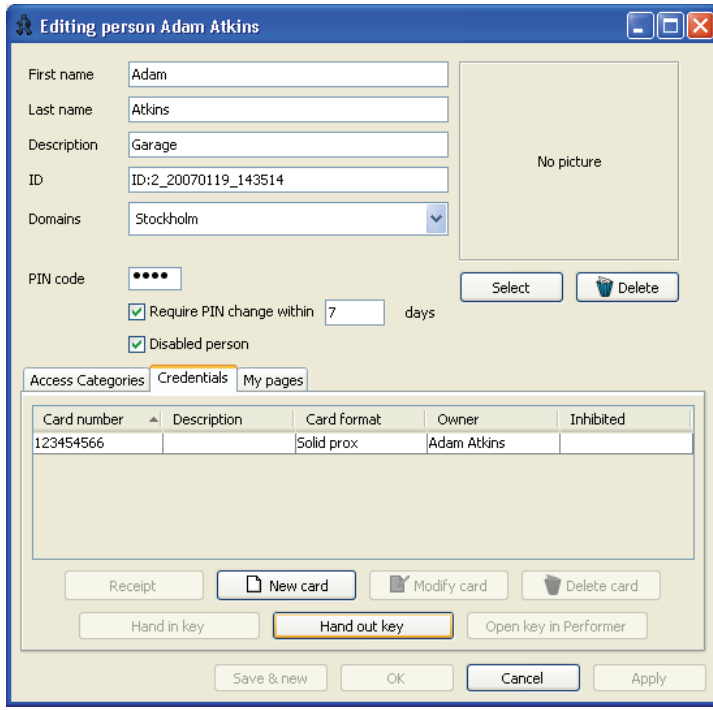
If regular Assa keys are used, administration of these can be made in the ARX client software. This is done by calling the stand alone application Performer.

To be able to administrate keys, a licence is needed for Performer and Import/Export. Permission to create multiple operators is also required.

Hand out key

The following steps describe how to hand an Assa key out to a person through ARX:

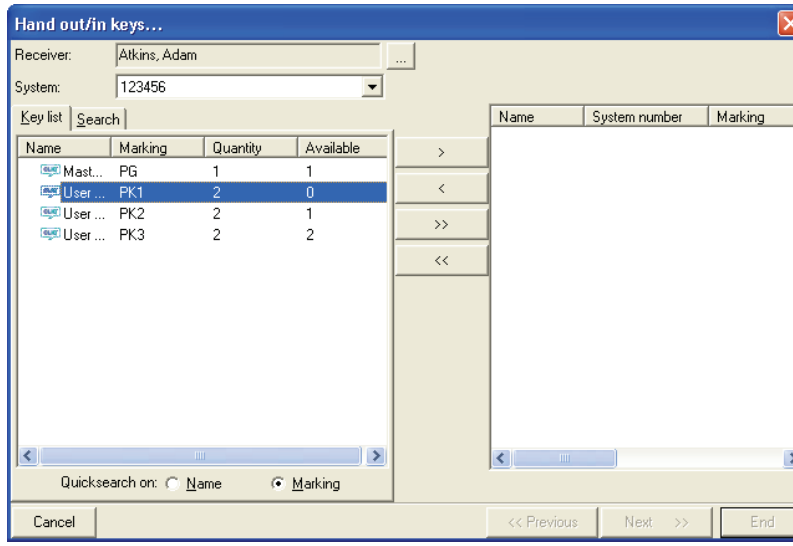
1. Click the *Credentials* tab in the lower part of the Editing person window. Click the *Hand out key* button. .



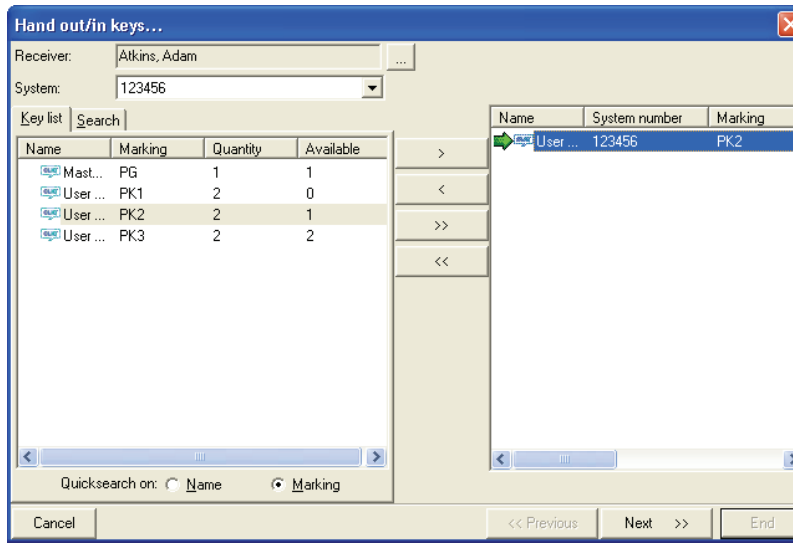
2. The *Performer* application starts.

For an entire explanation of the following steps, 3 to 5, and the functionality of *Performer*, refer to the Performer User guide.

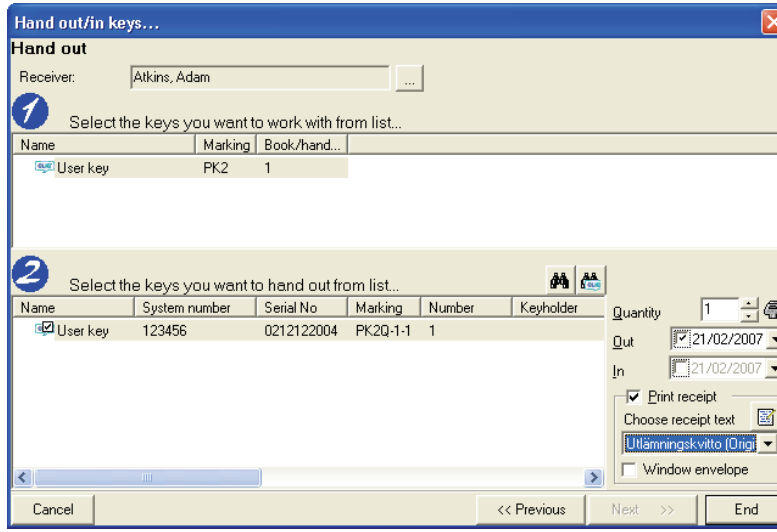
3. Start by choosing the System that is used.



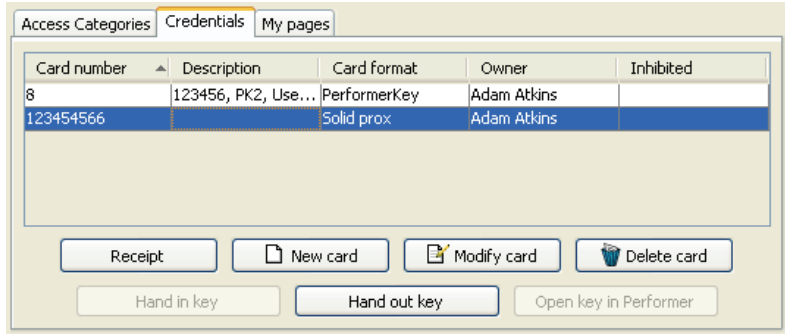
4. Choose one of the key groups (in the example below, PK1 is selected). Then click “>” followed by “Next”.



5. Choose one of the keys in the lower pane. Check the ”P*rint receipt”* if the person should sign (refer to the Performer user guide for more information). Click the *End* button.



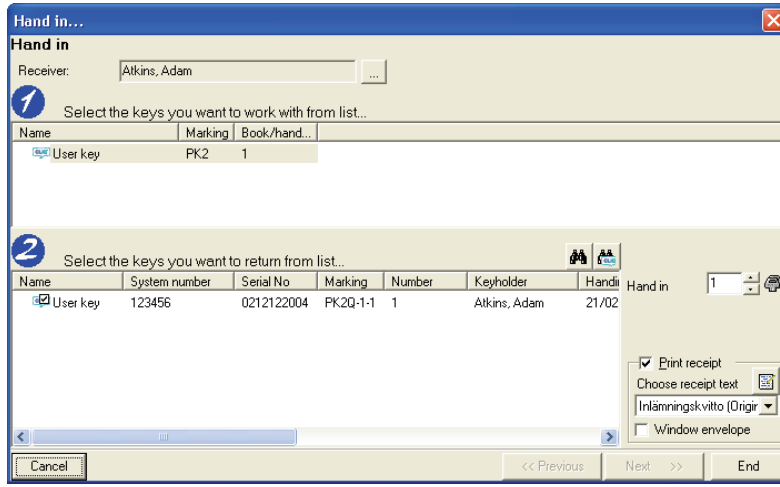
6. *Performer* synchronises with the ARX client software and shuts down. In the ARX client software an Assa key is added in the Credentials tab.



Hand in key

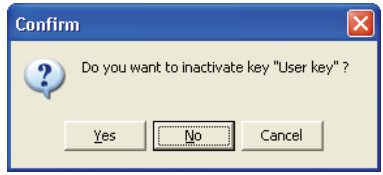
The following steps describes what to do when a person returns a key. (A complete description can be found in the Performer user guide.):

1. In the Persons window, click the *Credentials* tab and highlight the key that is to be handed in. Click the *Hand in key* button.
2. Performer starts. The following dialog window appears:



3. Check that the key that is handed in is checked in the list in the lower pane.

   Check *Print receipt* if this is desired. Finally, click *End.*
4. If the key shall be inactivated, click *Yes.*

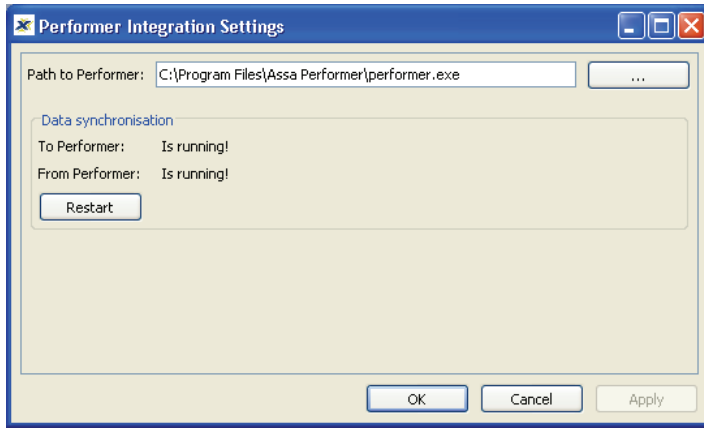


Performer synchronises with the ARX. Return to the ARX client software to continue working. (The application needs a few seconds to remove the key from the list.)

Performer Integration settings (option)

If the optional feature *Performer* is installed, administration of keys can be done from ARX Client software.

In order for the synchronization with the Performer application to work, ARX Client software needs the correct search path to Performer. In *Performer Integration settings* on the *System* menu you can edit these settings.



The status of the data synchronization between ARX and Performer can be seen in this window. The synchronization to Performer and from Performer must be running. If not, or if you experience other problems with the synchronization, you can perform a restart by clicking the *Restart* button.

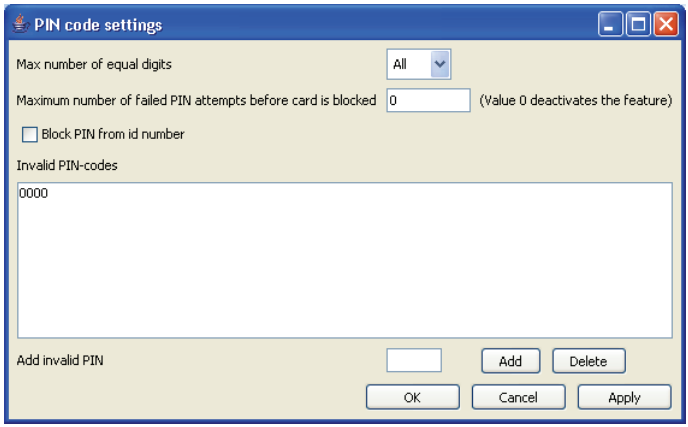
For installation of Performer, refer to "Installation of Performer" on page 428.

See separate user guide for more information on Performer.

Additional settings for Persons

PIN Code Settings

Options for this menu option (in the *System* menu) are:



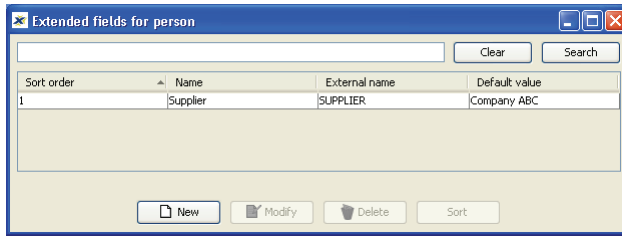
Window PIN code settings

- *Max number of equal digits*, i.e. the number of digits that are the same in a PIN code. (For example to stop codes like "1111" or "2222" from being used.)
- *Maximum number of failed PIN attempts before card is blocked*, i.e. how many incorrect PIN attempts that the system shall accept.
  NOTE! The value 0 deactivates the feature, and no maximum level is set and an indefinite number of attempts are accepted.
  NOTE! This counter will be reset to zero if any of the card's properties are modified between the attempts.
- *Block PIN from id number,* defines if the system will inhibit the possibility for a person to select a PIN code based on their ID number
- *Invalid PIN codes*, codes that are not allowed are written in the input field *Add invalid PIN* and are saved with the button *Add*.

Note that changes will only affect persons added after the changes in PIN code settings.

Extended Fields for Person

There is a possibility to add more text fields in the *Person* window (see "Persons" on page 39). The fields that are added here will later be shown in the *Person* window, under a special *Optional text fields* tab.



Window Extended fields for person

To add a new text field, do the following:

1. Select the menu *System* in the main window and click the option *Extended fields for person*.
2. In the window *Extended fields for person*, click the button *New*.
3. In the dialog window that opens, enter the *Name* that you want the field to have in ARX, and enter which *External Name* that this field will have when you export or import data. *Default value* (not mandatory) is the value that will be automatically prompted for this field.

Window to add an extra text field

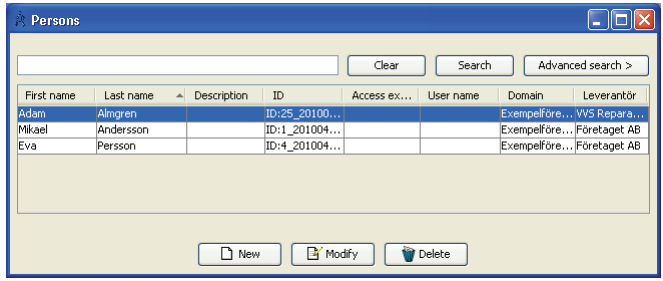
4. In the menu dialog, click *OK* if you want to save the information and close the window. Click *Cancel* if you want to close without saving the information.
5. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

Register a new employee

Stina Karlsson is a new employee at ”Company Example”. In order for her to have access to the premises she must be given an access card that is registered in her name in the ARX access system.

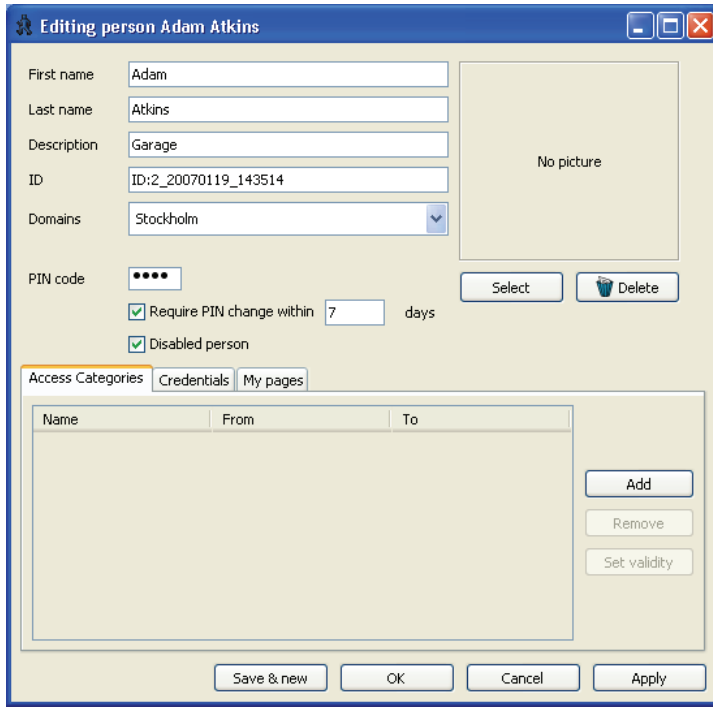
Click on the icon for person:

Under this tab all persons will be listed one after the other as they are added to the system.

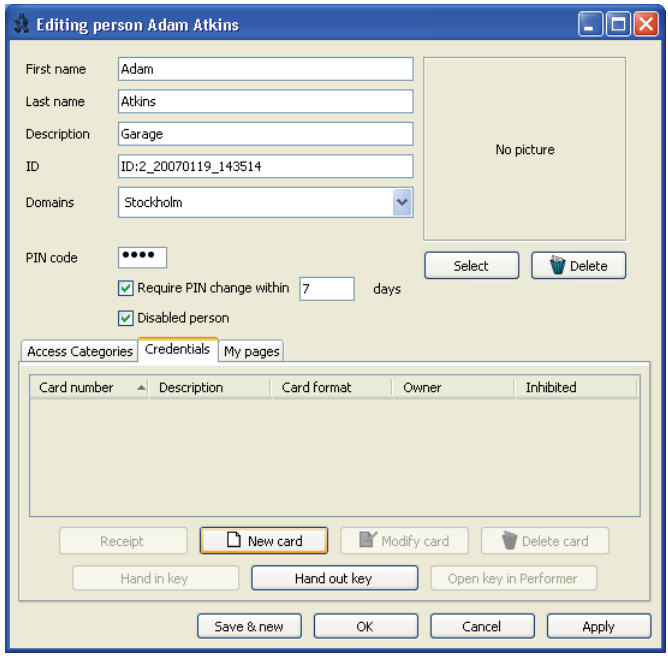


Click on *New*.

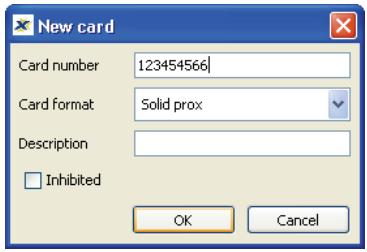
Fill in the name, description and pin code. An ID-number is created automatically by the system, if you do not complete this field.



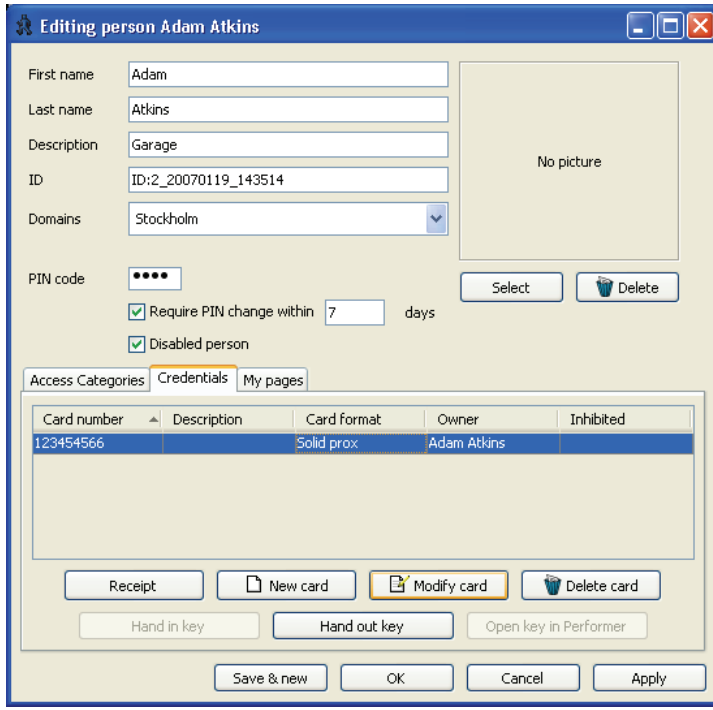
The next step is to connect a card to the person. Click on the card tab and then on New.



Fill in the card number and select Solid Prox in the window that opens, because “Company Example” has touch-free EM-card readers.



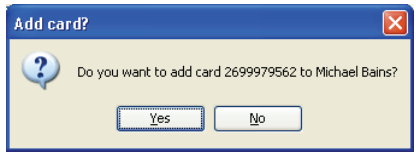
Click on *Ok*.



The card has now been allocated to the specific person.

Alternatively:

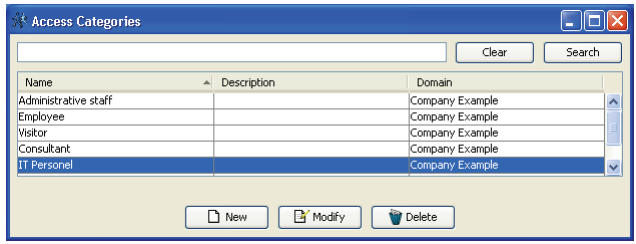
If you as the administrator have access to a card reader (PCI-10 reader) you can automatically read in a card under the tab *Person*. The following window opens:



Click on *Yes*.

Select access category

In order for Stina to be able to use her access card at Company Example, you must also select at least one access category. Click on the tab *Access categories* and select *Add*.

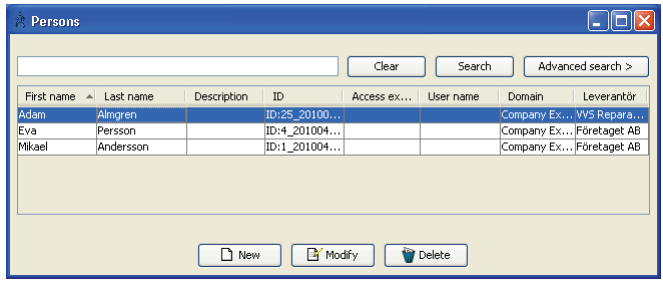


The window: Select access category.

Select *Employed* and click on *OK*.

Click on *Save*. Now Stina is able to use all of the premises that employees have access to.

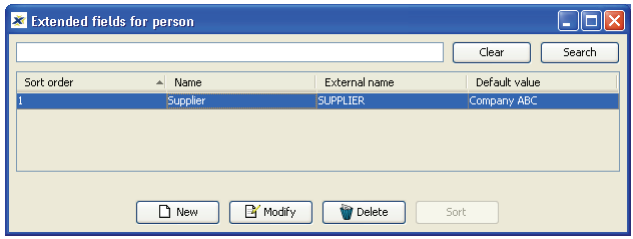
When you have pressed save, Stina Karlsson is stored in the system and can be seen in the list of persons.



Add input field in order to register company names

The Company wants it to be possible to input the company name into the system for external staff, for example repairers and hired personal. This is done in the following way:

1. In the main window *System*-menu, select the alternative *Extra field for person*.
2. In the window *Extra field for person* click on the icon *New*.

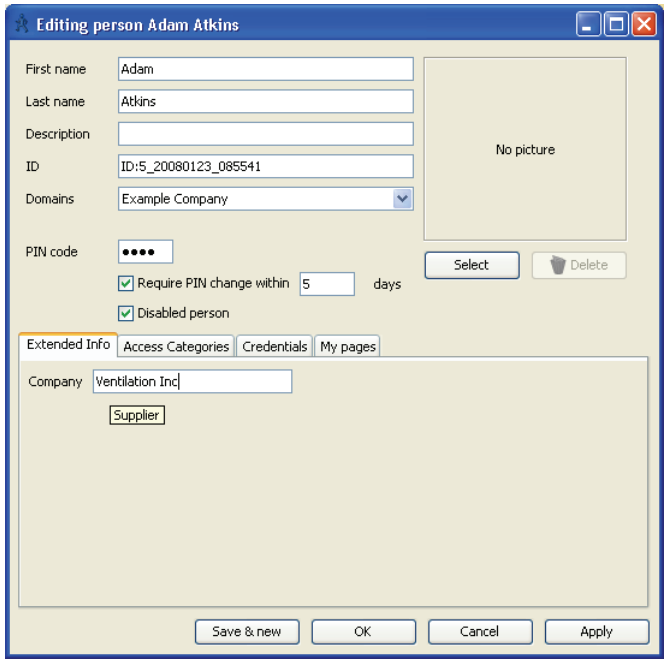


Window Extra field for person

3. In the dialogue screen that opens, type the following and click *OK*:

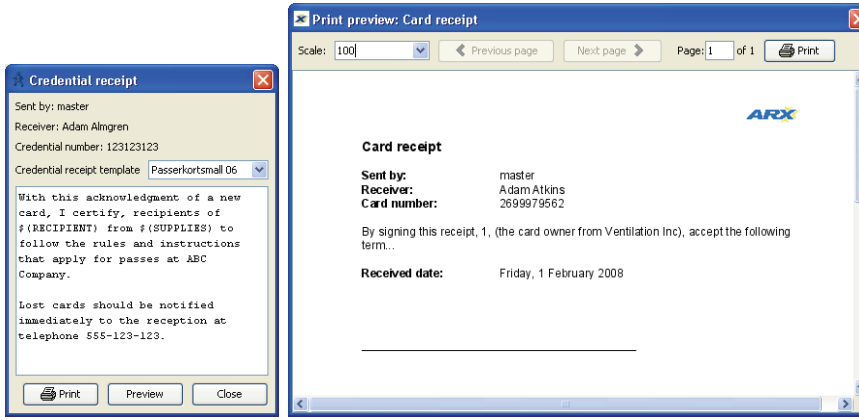
External name is used for receipts and for exporting and importing the database.

The administrator of ARX Access system is now able to write the company name in the “person” window:



Person window with an extra field for Company

The administrator can now use the new extra field to automatically show the company name on card receipts:


Credential receipt
Sent by: master
Receiver: Adam Almgren
Credential number: 12323123
Credential receipt template
Passerkortsmall 06
With this acknowledgment of a new card, I certify, recipients of $(RECIPIENT) from $(SUPPLIES) to follow the rules and instructions that apply for passes at ABC Company.
Lost cards should be notified immediately to the reception at telephone 555-123-123.
Print
Preview
Close
Print preview: Card receipt
Scale: 100
Previous page
Next page
Page: 1 of 1
Print
ARX
Card receipt
Sent by: master
Receiver: Adam Atkins
Card number: 2699979562
By signing this receipt, 1, (the card owner from Ventilation Inc), accept the following term...
Received date: Friday, 1 February 2008

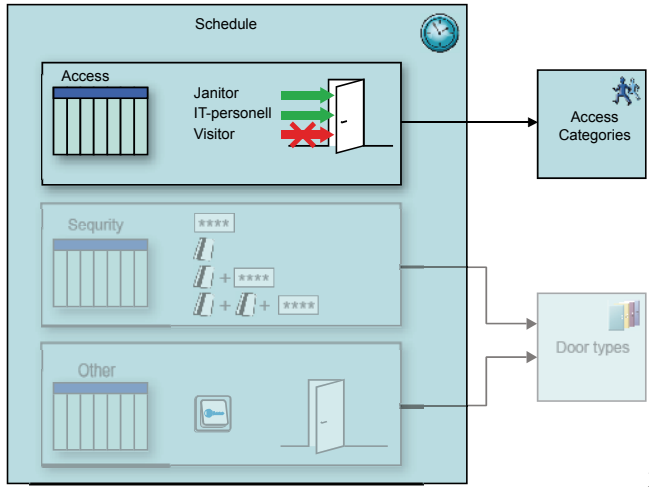
Access Categories

About Access Categories

An access category is a group of persons with shared security privileges. An example of access categories could be IT-personnel or Warehouse employees. It is possible for one person to belong to one or more access categories.

The premise that every access category have access to is not determined here, instead it is defined under *Access areas*, see page. 125.

The access categories' timed accessibility to different parts of the system is decided by the access schedule, connected to the access category in affected area.



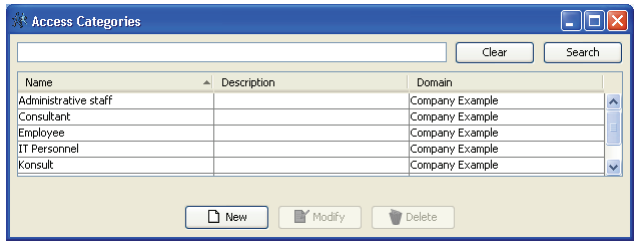
The access schedule decides the times during which different access categories are admitted.

This section contains a step-by-step description showing how to:

- Create an access category
- Modify information attached to an access category.
- Remove an access category
- Give the standard validity for an access category
  (The period of time for which the access card is valid)
- Example from the Company Example

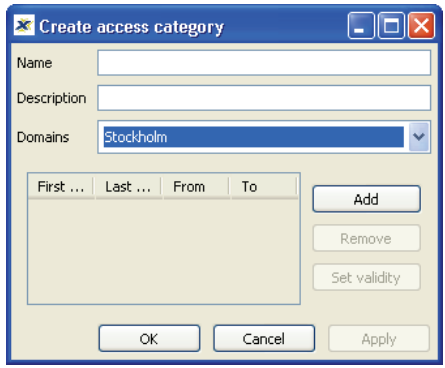
Create Access Category

1. Click the button *Access categories* in the main window.



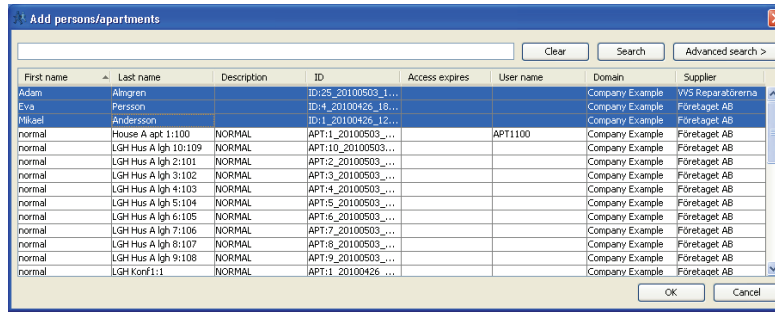
The window Access categories have a list over existing groups in the system.

2. Click the *New* button at the bottom of the window.

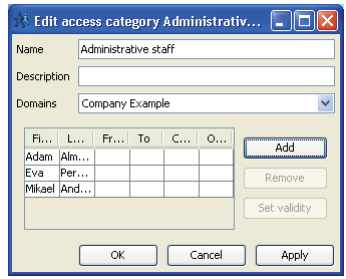


Window Create access category

3. Enter a *Name*, *Description* and choose *Domain* for the new access category.
4. It is also possible to add, remove or change the validity for persons in this category.
5. Click the *Add* button.
6. Choose the person/s you want to add/delete for current access category and press OK.



7. The person/s is/are added to the list:



8. To save the information and close the window, click *OK*. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and still keep the window open.

Modify Access Category

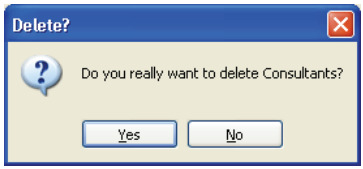
At any time you can add, modify and remove information attached to an access category.

1. Highlight the access category in the window *Access categories*.
2. Click *Modify*.

For more information on how to edit and add data, see "Create Access Category" on page 73.

Remove Access Category

1. Select the appropriate access category in the window *Access categories*.
2. Click *Delete*.

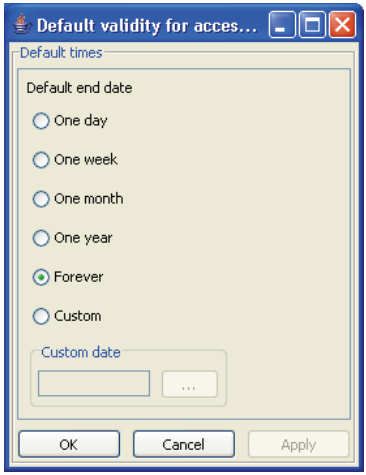


Query dialog for Delete access category

3. If you are sure that this is the correct access category to remove, click the button *Yes*.

Default validity for access categories

With this feature (in the *System* menu) you can set the default end date when adding a person to a access categories.



Window Default validity for access categories

Note that the default setting is *Forever*, which means that if no changes are made, all new persons added to the system will have access until they are removed from the system – or if you add an exception on a certain person.

Examples

Define access categories

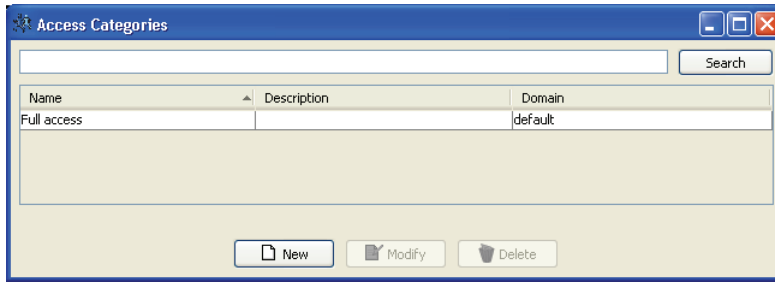
Access categories are used in order to group together people who need different access rights.

Hint: Normally the access categories should be named after a function, rather than a place or area. For example IT personnel instead of server room. (The authorities can then be increased by more areas, without the name of the access category being misleading.)

Company Example has several well defined groups that are practical to keep separate: *Employees, IT personnel, Visitors, Consultants and Caretakers*.

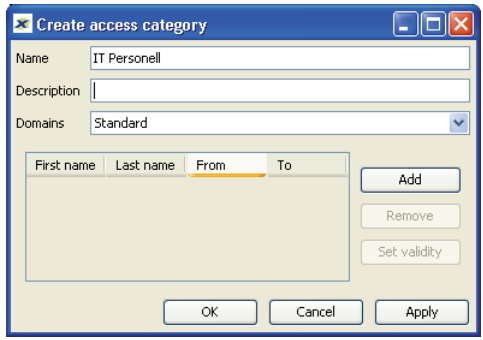
Repeat the following procedure to add access category groups:

1. Click on the *Access category icon* in the main window.



The access category window.

2. Click on the button *New* at the bottom of the window.



The window Create access category

3. Fill in *Name* and *Description* (not compulsory), and press OK.

Credentials

About Credentials

You can in ARX assign a person one or more cards or keys. This section contains a step-by-step description showing how to:

- Allocate card
- Inhibit card
- Clear the card owner
- Change card owner
- Remove card
- Administrate keys (option)
  Keys only applies if the Performer option is installed. It allows administration of keys in the ARX client software and this information will be synchronized with the Performer application.
- Examples

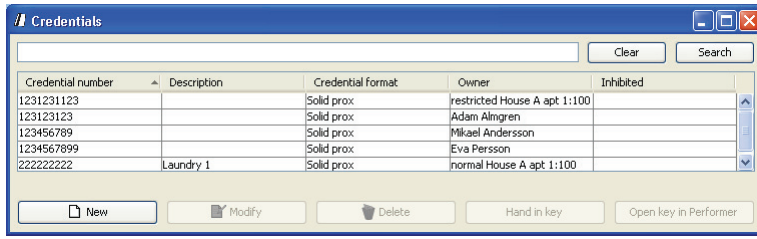
Allocate a card

A card can either be created at the same time as a person is added, or it can be added to the system independently. The card will not begin to function until it is allocated to a person.

Note that cards are normally not created on before hand, but when when a person is added.

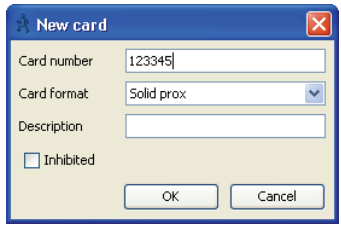
(If you use the card reader (PCI) you do not need to do the following, instead you only have to swipe the card and accept the reading in order to save it in the ARX Client software.)

1. Select the alternative *Card/Key* in the menu *Tools* in the main window.
2. In the window *Card/Key* that opens, a list is shown with the various cards/keys that have been added to the system.



The Card/Key window

3. Click on *New*.



Window for a new card

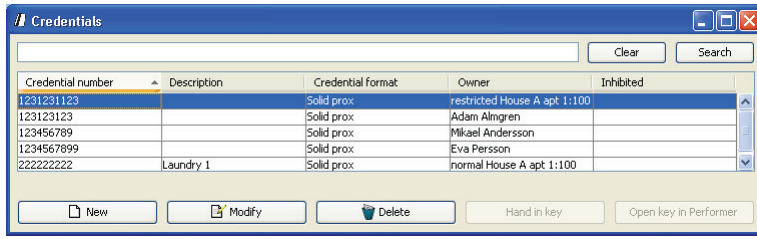
4. In the *New card* window type the *Card number* (that is usually printed on the card), state the *Card format* and write a short *Description*.
5. Click on *OK* if you want to save the information and close the window. Click on *Cancel* if you want to close the window without saving the information.

Search function

The Search function in the main window makes it possible for you to be able to find a specific card in a long list of cards. The Search Function searches through all fields.

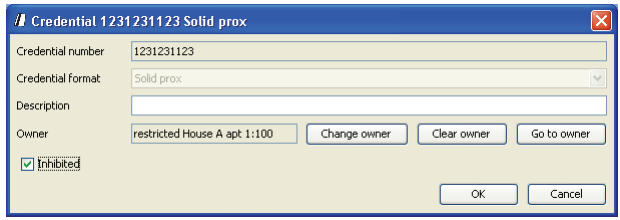
Inhibit a card

1. Select *Credentials* in the menu *Tools* in the main window.
2. In the window *Credentials* that now opens, a list of the cards (or keys) that are stored in the system is shown.



Window Cards

3. Highlight the card you want to inhibit in the card list and click the button *Modify*.



Window to modify a card

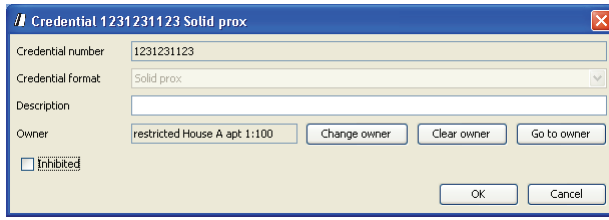
4. In the window that now opens, check the *Inhibited* checkbox.
5. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

In the window *Credentials* the inhibited card is shown with a cross in the in the column *Inhibited*.

Change owner/card number

This option will remove the information about the owner from the card and make the card available again

1. Select the option *Credentials* in the menu *Tools* in the main window.
2. In the window *Credentials* that now opens, a list of the cards (and keys) that are stored in the system is shown.
3. Highlight the card that you want to edit in the card list and click the button *Modify*.



Window to modify a card

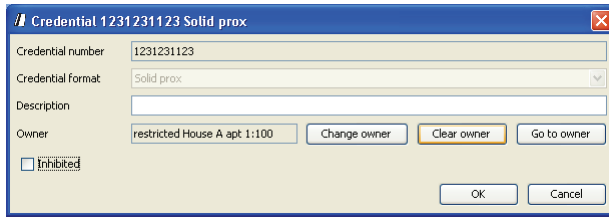
4. In the window that now opens, click the button *Change owner*.
5. Choose a new person from the list and click *OK*.
6. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

The card is now shown in the window *Credentials* without any owner.

Clear owner

This option will remove the information about the owner from the card and make the card available again

1. Select the option *Credentials* in the menu *Tools* in the main window.
2. In the window *Credentials* that now opens, a list of the cards (and keys) that are stored in the system is shown.
3. Highlight the card that you want to edit in the card list and click the button *Modify*.



Window to modify a card

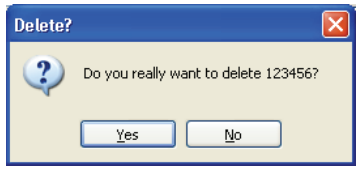
4. In the window that now opens, click the button *Clear owner*.
5. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

The card is now shown in the window *Credentials* without any owner.

Remove credential

This means that the credential is hidden in the system. Removal also means that the card is removed from the person it belonged to.

1. Select the option *Credentials* in the menu *Tools* in the main window.
2. In the window *Credentials* that now opens, a list of the cards (and keys) that are stored in the system is shown.
3. Highlight the card that you want to remove in the card list and click the button *Delete*.
4. If you are sure that you want to remove this card, click *Yes* in the query dialog that appears.



Query dialog to remove a card

When you remove a card from the list in the window *Credentials,* this card is also removed from the person associated with it.

Open key in Performer (option)

Administration of keys is handled by the Performer application. To open a key in Performer, do the following:

1. Select the option *Credentials* in the menu *Tools* in the main window.
2. In the window *Credentials* that now opens, a list of the keys (and cards) that are stored in the system is shown.
3. Highlight the key that you want to edit in the card list and click the button *Open key in Performer*.

All key settings are described in the Performer user guide.

Other settings for Credentials

Card Format

With the function *Card format* you can change the settings for existing card formats, add new formats or remove card formats.

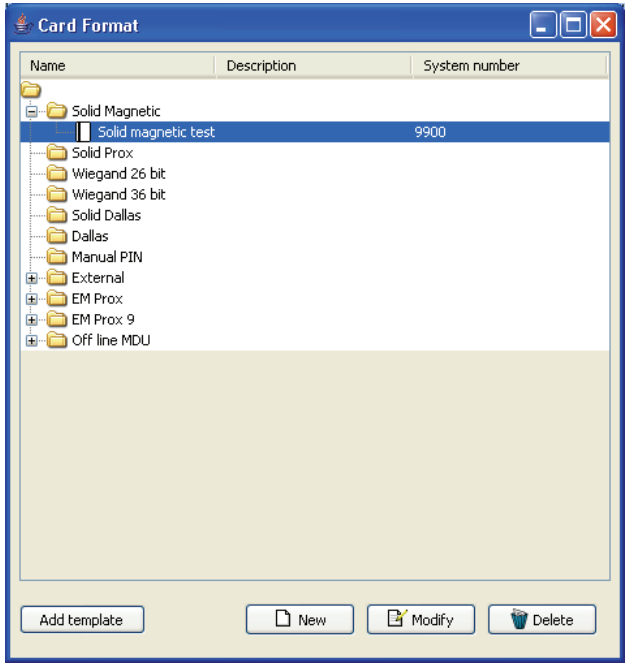
- **Solid magnectic**
  Format for card that can be read by the Assa reader and are programmed according to the Assa standard.

- **Solid Prox**
  Format for touch free cards, EM-4102.
- **Mifare**
  Format for cards and a reader with higher security than Solid Prox.

Modify format settings

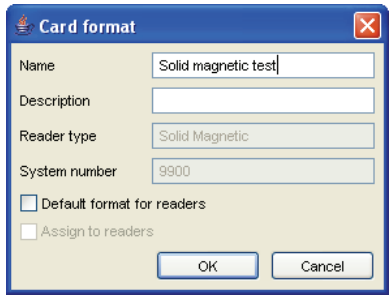
To change the settings for a card format, do the following:

1. Select the menu *System* in the main window and click the option *Card format*.



Window Card format

2. Highlight the card format that you want to change in the list and click the button *Modify*.



Window for card format settings

3. You can select the option *Default format for readers* which means that the current card format will be the format that is automatically prompted when you add readers to your installation.

4. Click *OK* if you want to save the information. To close the window without saving the input, click the *Cancel* button.

NOTE! For certain card formats, some of the parameters are locked and greyed out. Locked parameters can not be changed.

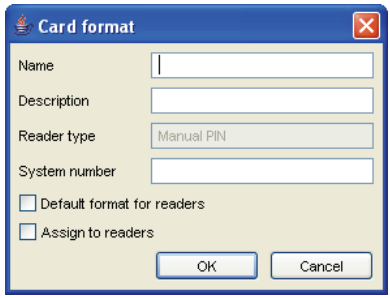
Add Card format

To add a new card format, do the following:

1. Select the menu *System* in the main window and click the option *Card format*.

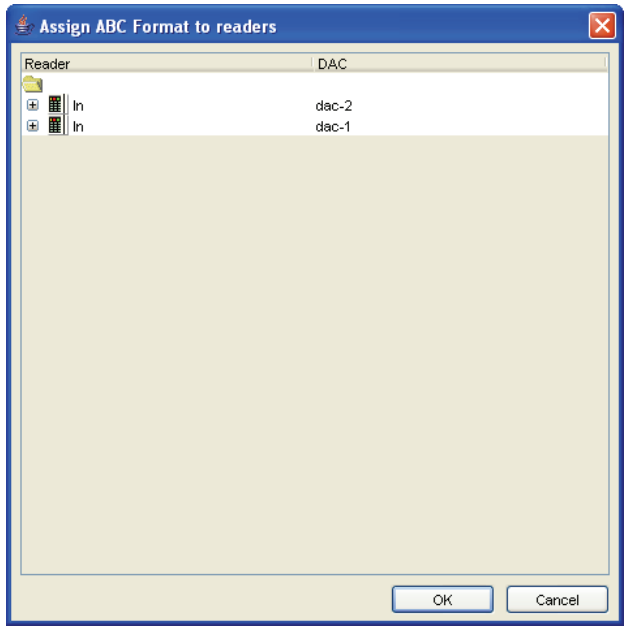
2. In the window *Card format* select a reader type and click the button *New*.

3. In the new window that opens, you can now give a *Name* and set the parameters for the new card format.



Window Card format with settings for the new card format

4. In the field *System number,* enter the shared system number that is applicable for this card format.
5. You can select the option *Default format for readers* which means that the current card format will be the format that is automatically prompted when you add a new reader to your installation.
6. If you select the checkbox *Assign to readers,* a new window displays where you can choose to assign the new card format to readers that are already in the installation.



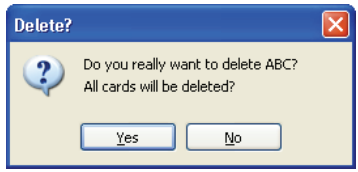
Window to add a new card format to existing readers

7. Click *OK* if you want to save the information. To close the window without saving the input, click the *Cancel* button.

Remove card format

To remove an existing card format, do the following:

1. Select the menu *System* in the main window and click the option *Card format*.
2. Highlight the card format that you want to remove in the list and click the button *Delete*.
3. The card format now disappears from the list for valid card formats.
4. If you are sure that you want to remove this card format, click *Yes* in the query dialog that appears.



Query dialog to remove a card format

Note that when you remove a card format, all cards in ARX of this type are deleted.

Add Card format Template

In the ARX client software you can also add (or import) pre-defined card format templates. These format templates must be in CTI format (i.e. with the file extension *.cti).

If you have a card format or a reader that are not supported by the formats included with the ARX installation, contact ASSA to receive a new format template.

1. Select the menu *System* in the main window and click the option Card format.
2. In the *Card format* window that now opens, click the button *Add template*.
3. In the file browser that now opens, step to the folder where the template is stored, select the format template file and click *OK*.
4. The format template is now added to the list of valid card formats.

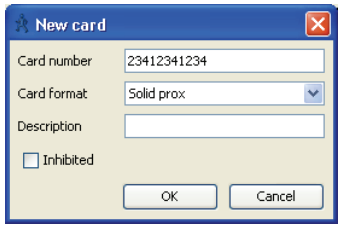
Examples

Lost Card

Stina Karlsson has lost her card (or her old card no longer functions).

In this case Stina has to be allocated a new card, at the same time as the old card is totally deleted from the system.

1. Open Stina Karlsson.
2. Go to the tab Cards/keys, mark the card that is to be removed and click on *Delete card*.
3. Add a new card.



4. Save Stina Karlsson

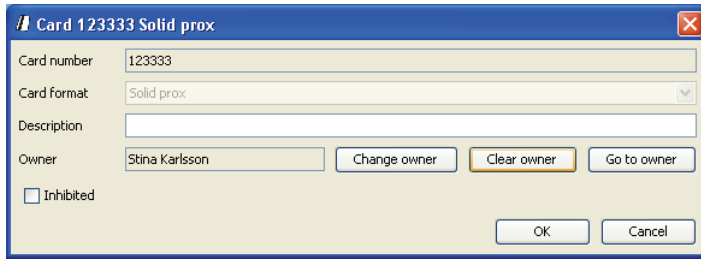
Alternatively if Stina has lost her card, just inhibit it in case she finds it again.

An employee leaves

Stina Karlsson leaves.

The card only has to be cleared when Stina returns it. When a new employee starts working at the Company Example the card is already in the system and can quickly be re-used.

1. Open the window *Cards/keys* and open the card that Stina Karlsson has.
2. Click on Clear Owner.



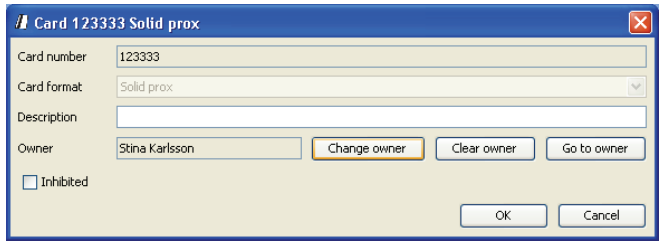
3. Click on OK to confirm.

Card registered on the wrong person

You as the administrator have registered a card on the wrong person by mistake.

Instead of removing the card and registering it again, you are able to quite simply select *Change owner* in the window *Change card*.

1. Open the *Cards/Keys* window and open the card that has been given a wrong owner.
2. Click on *Change Owner*.



3. Select the person who should have had the card from the beginning.
4. Click on OK to confirm.

Card Receipt Templates

About Card Receipt Templates

With the feature *Card receipt templates* the operator can create his or her own receipt templates. The receipts based on these templates can be used to facilitate the administration of cards.

What to include in a receipt template is up to the card administrator to decide, but frequently used items are:

- Issuer
- Recipient of card
- Card number
- Date
- Receipt/Signature

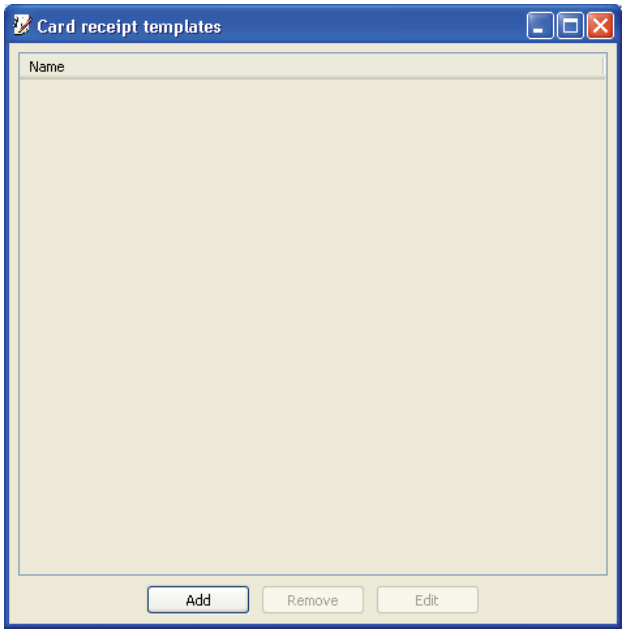
Additionally, it can be useful to include information regarding applicable rules concerning card handling for the users.

If no template is created the ARX Client Software standard template *No text* is used.

Example of the default receipt template (with no additional text)

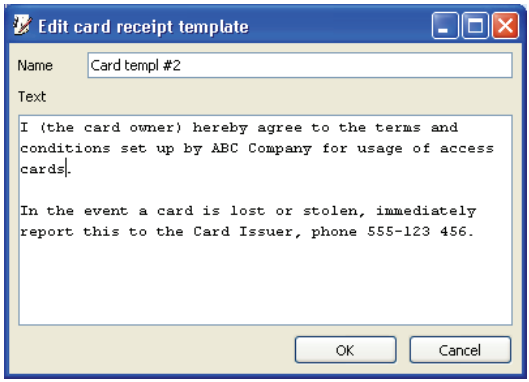
Add Card Receipt Template

1. Select the menu *Tools* in the main window and click the option *Card receipt templates*.



Window Card receipt templates

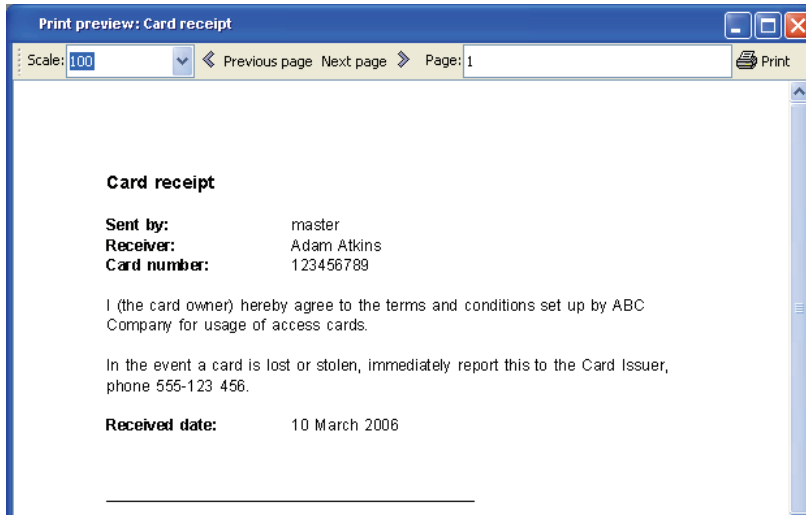
2. Click on the button *Add*.


Edit card receipt template
Name
Card templ #2
Text
I (the card owner) hereby agree to the terms and conditions set up by ABC Company for usage of access cards.
In the event a card is lost or stolen, immediately report this to the Card Issuer, phone 555-123 456.
OK
Cancel

Window Edit card receipt template (with example text)

3. Enter any text that should be included in the new card receipt template.
4. Click *OK* if you want to save the information. To close the window without saving the input, click the *Cancel* button.

The standard information such as: *Issued by*, *Receiver*, *Card* number and *Received date* is automatically added to all card templates.


Print preview: Card receipt
Scale: 100
Previous page
Next page
Page: 1
Print
Card receipt
Sent by: master
Receiver: Adam Atkins
Card number: 123456789
I (the card owner) hereby agree to the terms and conditions set up by ABC Company for usage of access cards.
In the event a card is lost or stolen, immediately report this to the Card Issuer, phone 555-123 456.
Received date: 10 March 2006

Example of the default receipt template (with no additional text)

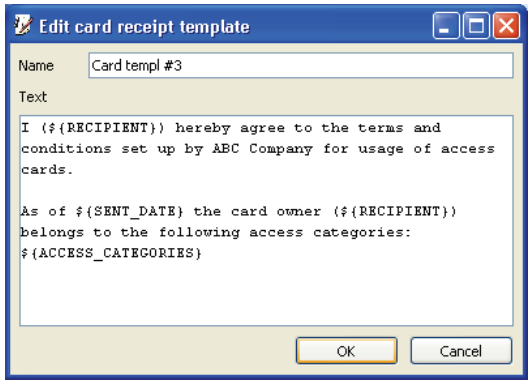
Additional information (fields)

It is possible to add additional information to card receipt templates. This is done by entering specific field codes in the *Edit card receipt template* window. The valid field codes are:

- ${ISSUED_BY}
- ${RECIPIENT}
- ${SENT_DATE}
- ${CARD_NUMBER}
- ${PERSON_EXTERNAL_ID}
- ${ACCESS_CATEGORIES}

The operator can also add all additional fields created for persons with the *Extended fields for person* option (*System* menu). These extended fields must be written in the receipt template window

exactly as they were created. Upper- and lowercase characters must correspond to the original name. Example: ${company}


Edit card receipt template
Name
Card templ #3
Text
I (${RECIPIENT}) hereby agree to the terms and conditions set up by ABC Company for usage of access cards.
As of ${SENT_DATE} the card owner (${RECIPIENT}) belongs to the following access categories:
${ACCESS_CATEGORIES}
OK
Cancel

Card receipt template with field codes

Edit Card Receipt Template

1. Select the card receipt template you want to edit in the *Card receipt template* window.
2. Click on *Edit*.
3. Make the desired changes and save these by clicking *OK* in the *Edit card receipt template* window.

Remove Card Receipt Template

1. Select the card receipt template you want to edit in the *Card receipt template* window.
2. Click on *Remove*.

Web interface

About Web Interface

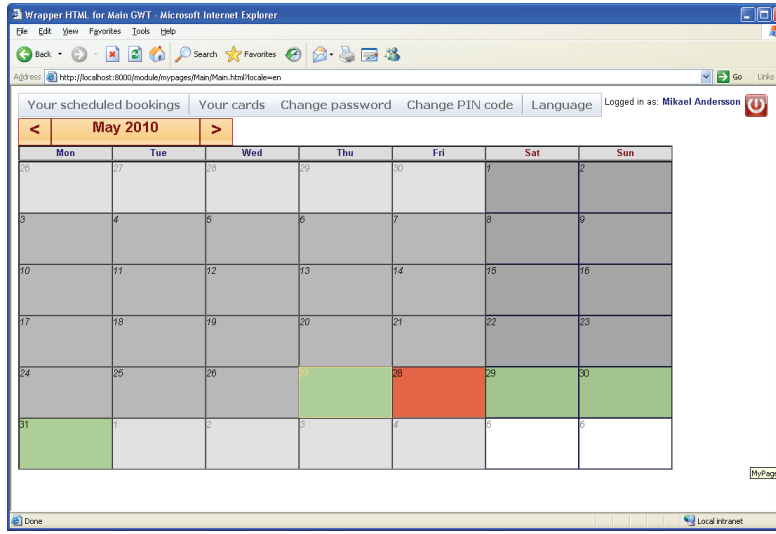
A web interface is attached to the ARX. Here it is possible for both you as an administrator to have access to the system and your users can have access to a number of functions, for example booking of the laundry room, conference room or changing their card's PIN-code.

The chapter deals with the following two areas:

- **My Pages**
  This is the users interface. As the administrator you are able to adapt the look and content of the interface.
- **Administration of My pages**
  Instructions for the administrator of ARX to add users to my pages.

My Pages

My pages is a web interface for all users in the system. All cardholders can change their PIN-codes to their access card, inhibit a card that is lost and manage, for example, the booking of the laundry or conference room.



My pages home page with the booking calender

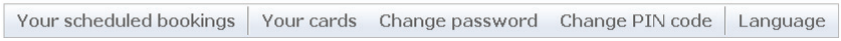
Log in to My Pages

A user can reach My pages via the following address:

https://[IP address of the ARX server]:5002
(alternatively http://[IP address of the ARX server]:8000/module/mypages if the certificate is not used)

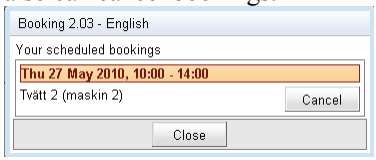
(The IP address of the ARX server is normally given by the head of the computer department.)

Menu of My pages



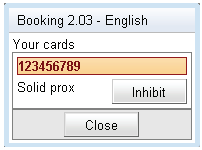
The menu of My pages

- **Your scheduled bookings**
  Lists all bookings made by user logged in. Here the user also can cancel bookings.



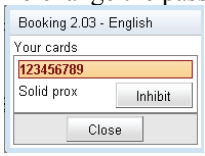
Pop-up window for scheduled bookings

- **Your cards**
  Lists all cards of a user. Here the user can inhibit lost cards.



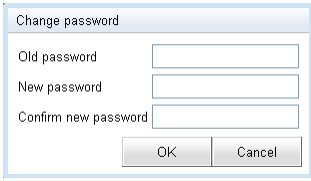
Pop-up window forYour cards

- **Change password**
  To change the password for My pages.



Pop-up window for changing password

- **Change PIN code**
  To change PIN code for access card(s).



Pop-up window for changing PIN code.

- **Language**
  To change the language of My pages.

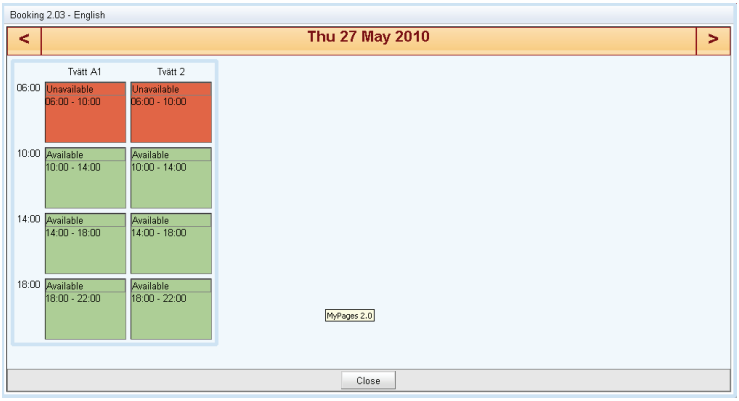
Pop-up window for changing language of My pages

Make a booking

The users can book a booking object, conference rooms, washing machines or study rooms for example, depending upon how the system is arranged.

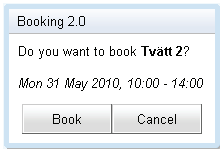
This is how the user makes a booking.

1. Click on the desired day in the calander.



Pop-up window for the booking function in My pages

2. Choose a booking object and click on desired time slot.
3. Accept by clicking *Book.*



Click Book to accept a booking

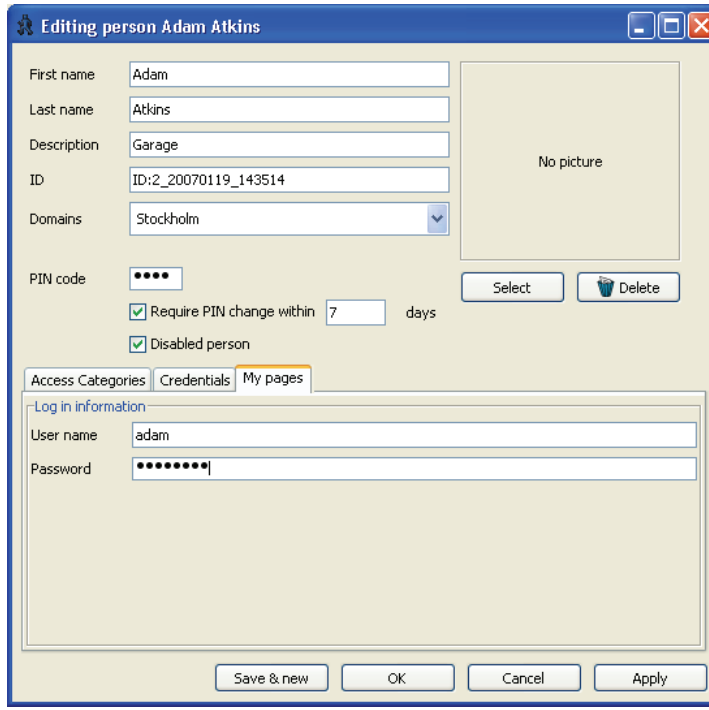
The user can then cancel a booked time by clicking on *Your scheduled bookings in the menu of My pages.*

Administration of My Pages

Log in settings for My Pages

The following steps show you how to attach a user name and password to a person. This information can then be used by the person to log in to the web module *My Pages*.

1. Click the *My Pages* tab in the lower part of the *Editing person* window.
2. Enter a suitable *User name* and a *Password* for the person in question.
3. To save the information and close the window, click on *OK*.



Person window with the My pages tab active

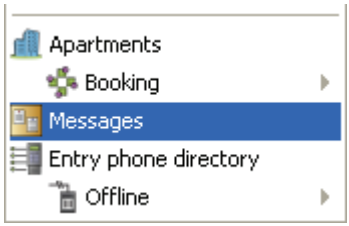
NOTE! Even though no credentials are entered, the user can still log in to *My pages* with the **card number** and **pin code**. But as soon as a user name and password is added in the dialog above, the log in method using card number and pin code no longer function.

Messages (option)

The *Messages* feature in the ARX client software makes it possible to broadcast messages to users in the system. These messages are shown in the users personal web interface (*My Pages*) at log in. The messages can for example be notifications regarding upcoming activities or service information.

With the *Message* option in the ARX Client software an operator can create messages and decide during which period the message should be valid.

To make the *Messages* functions accessible in the ARX Client software a valid licence that covers this module must be installed.

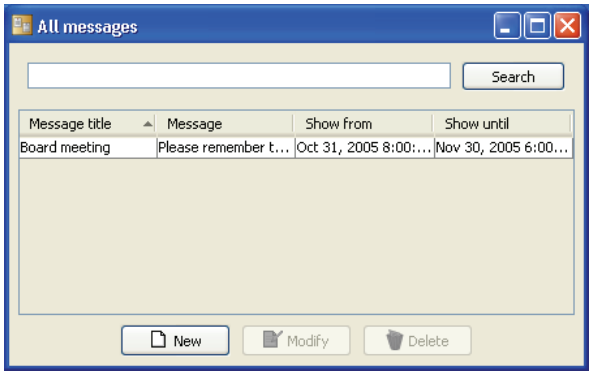


The Messages menu option (Tools menu)

Create new message

To create a new message, do the following:

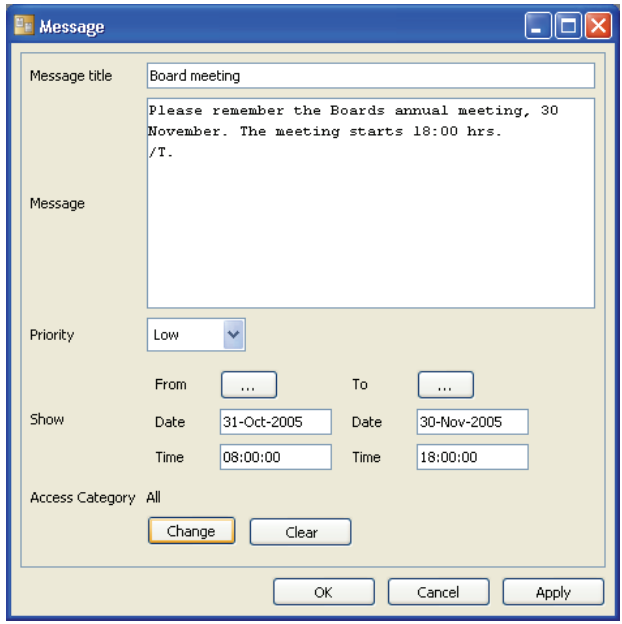
1. Select the *Messages* menu option in the *Tools* menu.



Window All messages

2. In the *All messages* window, click on the *New* button.
3. In the *Message* window that now opens all settings for how the message shall be distributed are visible.

4. You can enter a *Message* text, set the massage's *Priority* and decide during which period the message should be active. It is also possible to set to which recipients the message should be shown.



Window Create message

5. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open

Modify a message

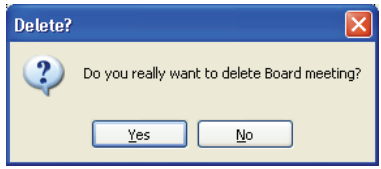
To change the settings for a message, do the following:

1. In the window *All messages*, highlight the message that you want to change and click *Modify*.
2. In the window that now opens you can modify or change the settings for the message.
3. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

Remove message

To remove a message, do the following:

1. In the window *All messages*, highlight the message that you want to remove and click *Delete*.
2. If you are sure that you want to remove this message, click *Yes* in the query dialog that now appears.



Query dialog Delete message

Schedules

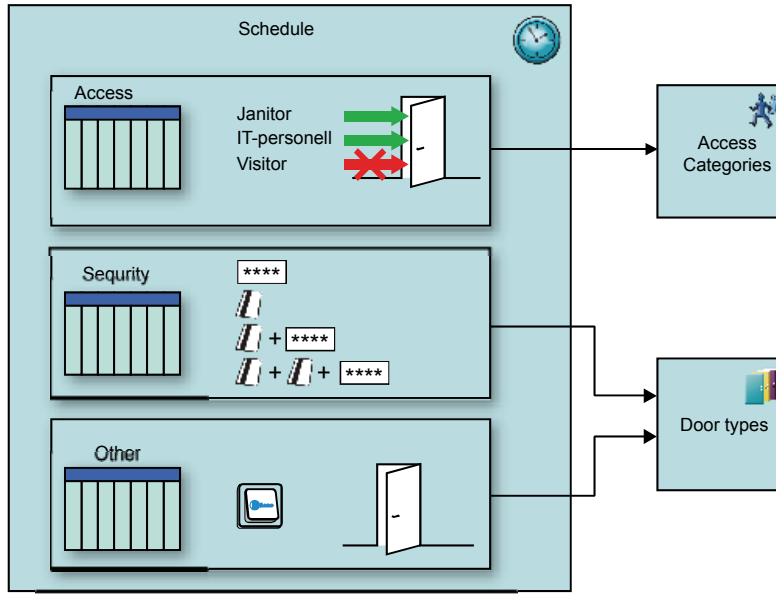
About Schedules

By using schedules in the ARX you can organize the access control system to suit your requirements and solutions for security.

Schedules are used, for example, to restrict access to an office for a period of time, and for managing access controllers and security levels.

There are three different schedule groups in the ARX. These three groups control:

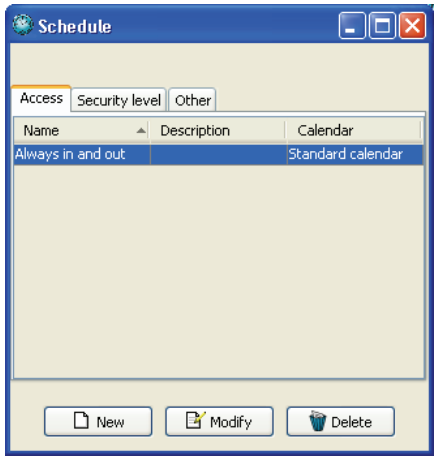
- **Access**, weekly schedule that determines which times that admittance shall be given to the access system.
- **Security levels,** weekly schedule that decides which level of security (code, card or code plus card etc) that is needed for a certain point in time.
- **Other settings,** weekly schedule that determines during which times that relays and operation modes (for example the exit button) shall be active.



The picture shows the three different schedules that control access, security level and the additional that control relays and the doors' operation modes

In order to work with one of the different schedule groups, click the *Schedule* button in the main window.

In the *Schedule* window that now opens, there are three tabs, one for each of the schedule groups.

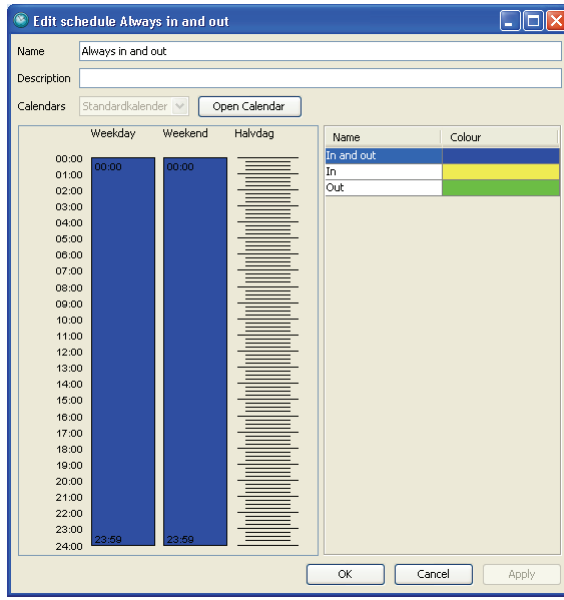


Window Schedule with tab Access activated

Access schedule

Access schedules are used to restrict In- and Out rights for access categories. This means that these schedules only control doors with entry-and-exit readers.

In this schedule group, there is also a predefined schedule, *Always in and out*, that gives entry and exit rights every day, and all day.



Window for access schedule

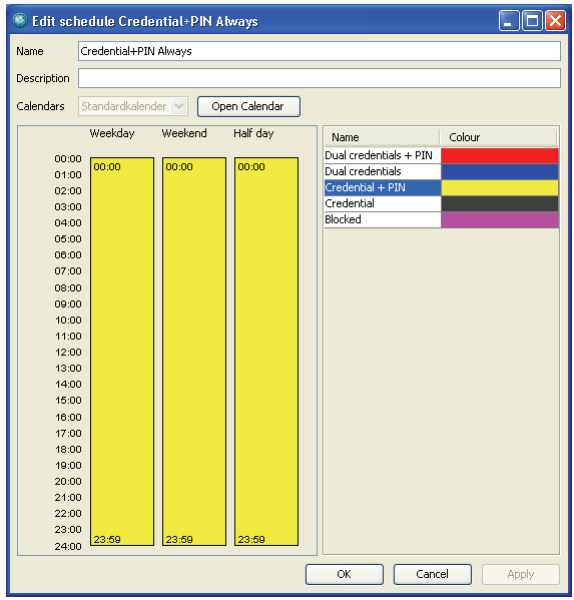
Security level schedule

Schedules for security levels are used to control security conditions for Entry and Exit. In this group, there are two predefined schedules, *Always card* and *Always card + PIN*.

The predefined options are: *Dual cards + PIN, Dual cards, Card + PIN*, *Card* or *Blocked*.

NOTE! You can only have one security level active at any one time. In other words, you must select either the option *Card* or the option *Card + PIN* for a specific period.

NOTE! The Dual credentials alternative does NOT apply during alarm activation or deactivation, which always can be done with only one card (and PIN if this security level is active)



Window for security level schedule

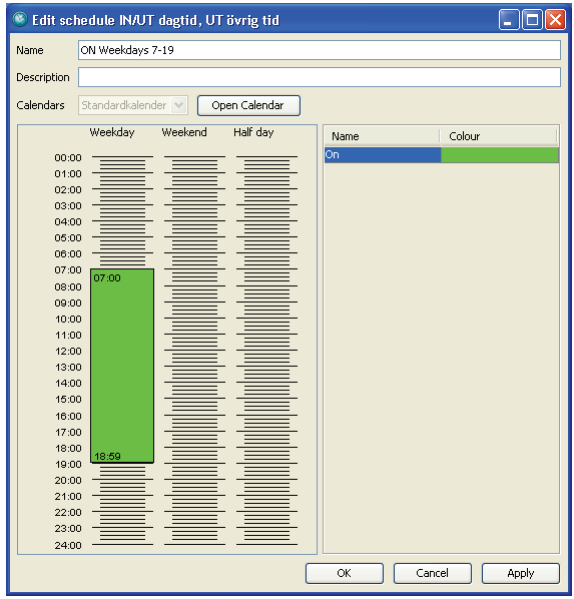
Other schedules

The group for additional schedules is used to control relays and operation modes (for doors and readers) in the system.

For example, to control during which times the outputs of a relay are active, or during which times one is able to keep a door open (operation mode unlocked door for a specific door).

The Additional schedule is used when defining door types.

This schedule controls when the different functions of the system shall be *On* or *Off*.



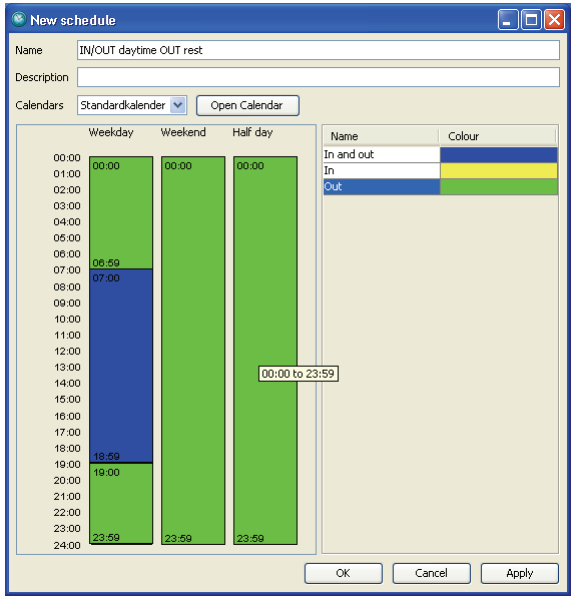
Window for an Additional schedule

(For more information about calendar settings and day types *Weekday/Weekend*, see "About Calendar" on page 319.)

Add Schedule

To add a schedule, do the following:

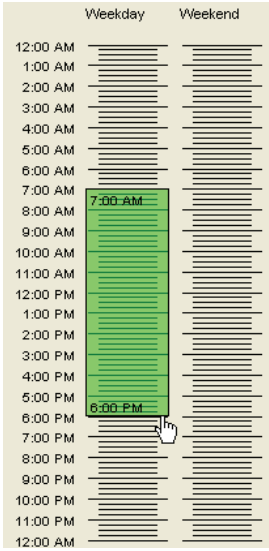
1. To select a schedule group, click one of the tabs in the window *Schedule*.
2. To add a new schedule to this group, click the button *New*.
3. In the step-by-step window that now opens, select a calendar by using the drop-down menu *Calendar*. Then click the button Next>.
4. Give the schedule a name by writing a text string in the field *Name*. And write a short description of the schedule in the field *Description*. (Not mandatory, but a good aid when you are using the schedule for a certain function.)



Window for a new schedule

5. To the right hand side of the window, select one of the schedule options (for example *In and Out*).

6. Define the period of time that this schedule will be valid. To do this, use the mouse cursor to drag the time bars for the start- and stop times (for example from 7:00 AM to 6:00 PM on the *Weekday* bar).
   Optionally, you can select all day by double-clicking in an empty time bar (*Weekday* or *Weekend*).
   To define an empty period, you can also double-click in a similar way. For example, to quickly define the entire "gap" in the valid period for the schedule, double-click above or below a period that is already defined.



Select a time period (from the window Schedule)

7. The time period you have chosen is now filled with the colour for this schedule.

8. If you want to adjust a period, position the mouse cursor at the top or bottom edge of the time bar and drag it up or down to add the start- or stop time. If you want to move the

entire period up or down, move the mouse cursor to the middle of the coloured time bar and drag-and-drop the entire period. When you are finished with the schedule settings, click *Finish*.

Modify Schedule

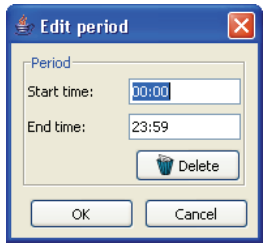
To modify a schedule, do the following:

1. To select the current schedule group, click one of the tabs for the main window *Schedule*.
2. To edit the schedule, click the button *Modify*.

It is possible to adjust the start- and stop time for the periods in the schedule by either changing them with the mouse cursor or by double-clicking the selected period.

If you double-click a period, the window *Edit period* opens. In this window, you can, for example, enter a new start- or stop time, or remove the entire period with the button *Delete*.

Note that the shortest possible period is 15 minutes.

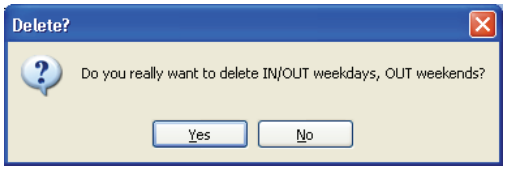


Window Edit period for changing or removing a period

Remove Schedule

To remove a schedule, do the following:

1. To select a schedule group, click one of the tabs in the main window *Schedule*.
2. To remove the schedule, click the *Delete* button.



Query dialog for deleting a schedule

3. If you are sure you want to remove the schedule, click *Yes*.

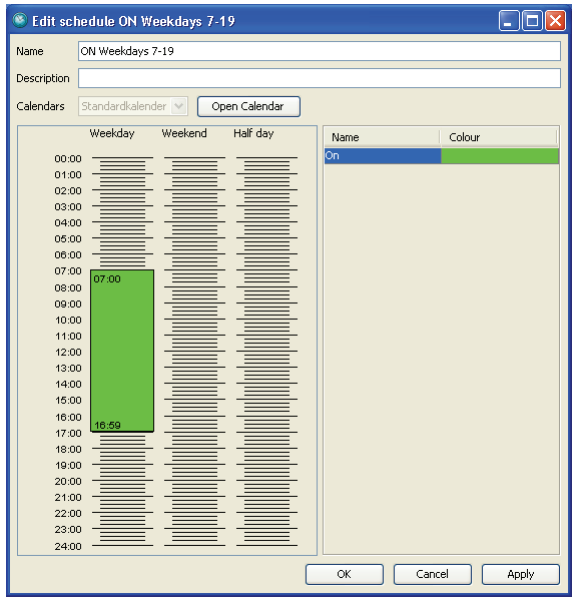
Examples

Change the time for the exit button

All exterior doors have an exit button. This shall be active up until 17.00 hours instead of 18.00 hours.

This is accordingly an additional schedule, which is used for exit buttons on doors and other operation modes that apply to doors.

1. Open the main *Schedule* window, go to the tab *Other* and open the schedule that is used by all exterior doors.
2. Click and pull down the lower time limit until 17 is showing instead of 18. Close by clicking on *Finish*.



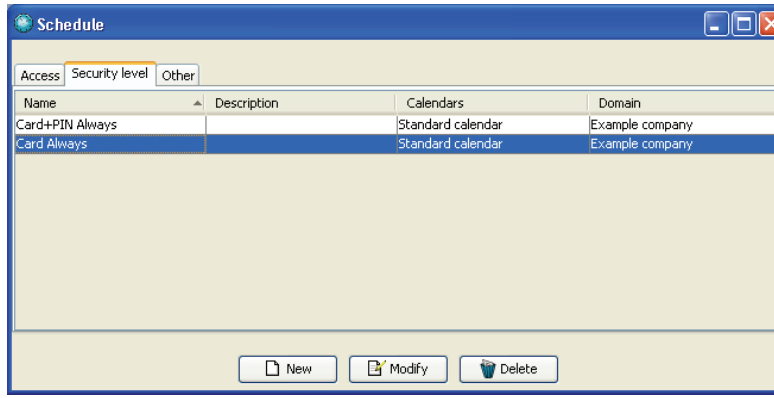
Increased security after theft

The Company Example wants to increase the security after thefts. Therefore all users must use their cards when leaving the building after 17.00 hours instead of 18.00 hours and card with PIN at weekends.

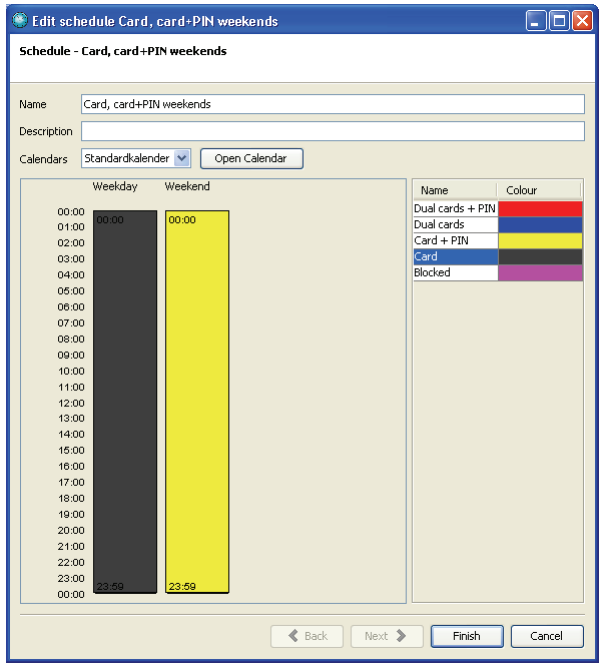
This is a question of security and is controlled by the security level schedule, which determines during which times cards and codes shall be used. Due to the fact that the exit button has previously worked until 18.00 hours, the remaining schedules must also be changed (see previous example).

1. Open the main Schedule window, go to the tab *Additional* and open the schedule that is used by all exterior doors. (Open the main Door Types window to check).
2. Change the *Additional* schedule according to the previous example to be valid until 17.00 hours.

3. Then go to the tab *Security level* and open the schedule that is used for all exterior doors and click on *New*.

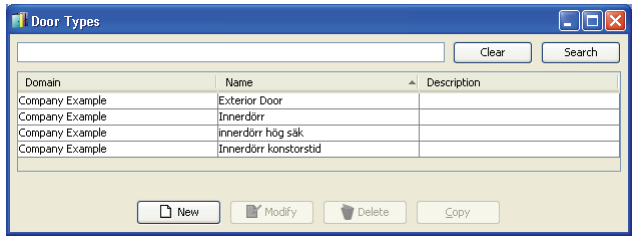


4. Press *Next* in the window that is shown. Click card+PIN and mark the whole column *Holiday*.

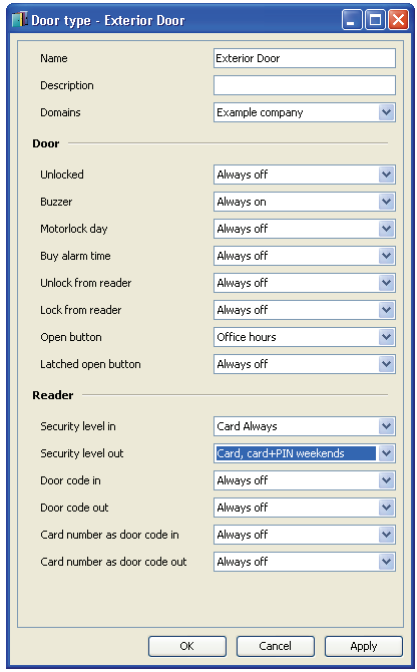


5. Click on *Card* and mark 8-17 in the column Weekday, click on CARD+PIN and double click the weekday column before and after where you marked for Card. Finish by naming the new schedules and press *Finish.*

6. Then open the main window *Door Types* and open *Exterior doors.*



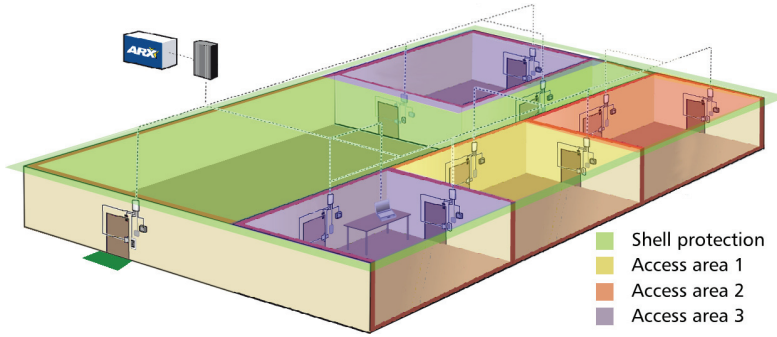
7. Change the schedule for the *Exit button* and select the additional schedule that you recently created, to set the exit button only to work between 8-17.
8. Finally change the schedule for the *Security level Out*. Select the security level schedule that you recently created.
9. This is how the installation now looks for the changed door type, exterior door. Click on *OK*.



Access Areas

About Access Areas

An ARX installation can be split up into a number of different access areas. An access area can, for example, be a floor level or a single room. You can subsequently attach a number of door units and also define which access categories that will be able to access the area.



An office with several different access areas defined.

With the function *Access areas,* you can construct the logical tree structure for your installation by using areas and door access

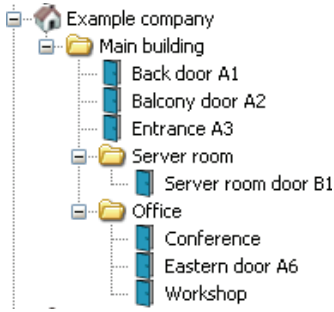
controllers (DAC). If the *Domain* option is installed, the logical tree structure is constructed for each domain.

A door must be connected to an access area in order to be used in the system. A free standing door that is not connected an access area will not be able to be opened with an access card.

By using the *Access areas* you can also link different access categories to one or more areas.

The different parts that you work with in the area structures are:

- Areas (Folder symbol)
- Doors (Door symbol)



An access area can have several underlying access areas. But a single door can only belong to one access area.

The following optional features exist:

- Floor levels
  (Requires the optional feature *Elevator)*
- Domains
  Domains are a comprehensive level to access areas. In order to decentralise administration, access can be divided into several domains. (Requires the Domain option)

Menu choices (areas)

In the window *Access areas,* there are a number of extra menu choices in order to simplify the building and customisation of the area structure.

Menu options in the window Access areas

These are, in order of appearance, and from left to right:

Add, depending on which level you are located in the tree structure, this menu option can add an *Area* or a *Door*

Remove, removes the selected object

Sort, places all objects in the tree structure in alphabetical order.

Expand, displays the whole tree structure for the selected folder area.

Show doors, option to show or hide all doors in the structure.

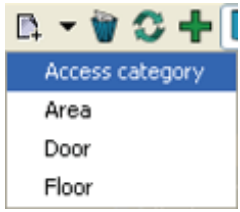
Search, use this option to search and manage available access categories or registered users. Every category or person that is registered is also shown with yellow markers in the area tree structure.

The menu option *Add* and *Remove* can also be reached by right-clicking with the mouse on the selected object in the area tree structure.

Add Access Area

To add an access area in the area structure, do the following:

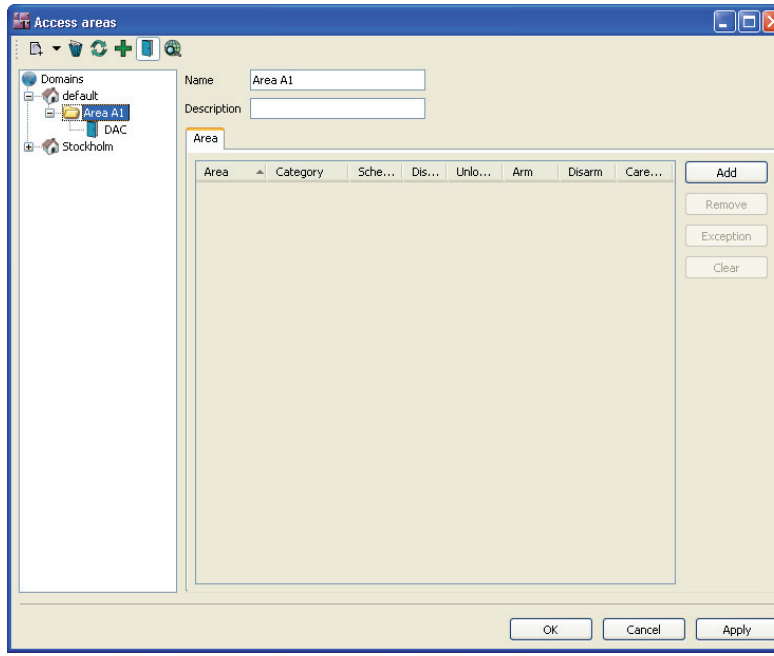
1. Highlight the level of the area structure where the new area is to be located.
   NOTE! The first time you create an access area, the top level is called *Access areas*. You can choose to amend the name of this level but it is not possible to remove it. (If you have the optional feature *Domains* is this you see.)
2. Then select the option *Add* in the menu bar of the window, and click *Area*.



Menu for add area

3. To the right side of the window *Access areas*, enter the *Name* of the new access area and write a short *Description*.
4. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open to continue adding new information.

The access area is now added to the area tree structure.



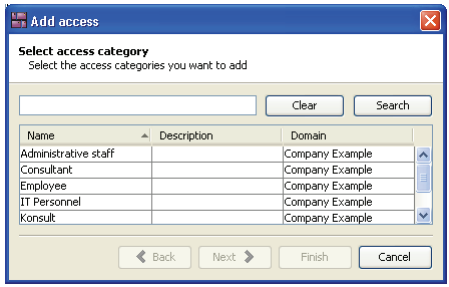
Window Access areas with information about the selected area

When you have selected an access area in the area tree structure on the left side of the window *Access areas,* its details are displayed in the right side of the window. The process of adding access categories to access areas is described below.

Add access category

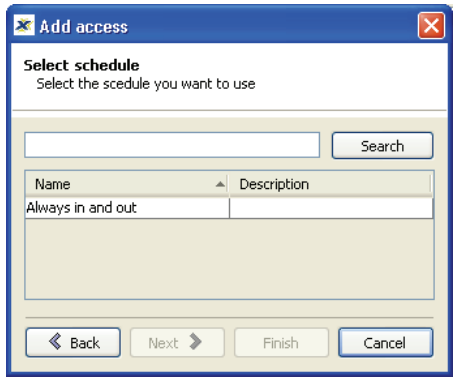
To add an access category to the area tree structure, do the following:

1. Select one or more areas in the area tree structure that you want to apply the access category. (To choose more than one area, keep the Ctrl key depressed while selecting)
2. Click the button *Add* on the right side of the window or right click.
3. In the dialog menu that is now displayed, select access category from the list and then click *Next>*.



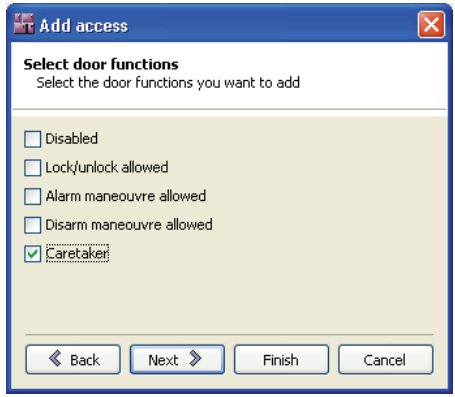
Window for selecting access category

4. In the next dialog menu, select the schedule from the list and then click *Next>*.



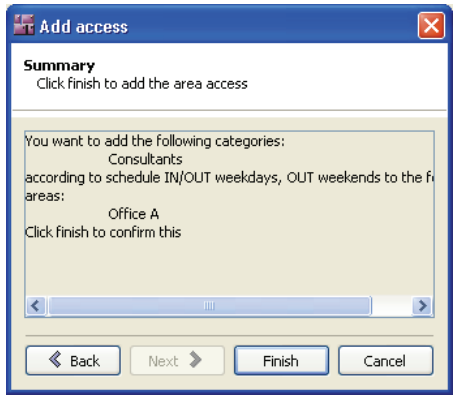
Window for selecting schedule

5. In the next dialog menu, select the door functions that are to be activated. Then click the button *Next>*.



Window Add access to select door functions

6. In the final dialog menu that appears, a summary of the choices you made is displayed.

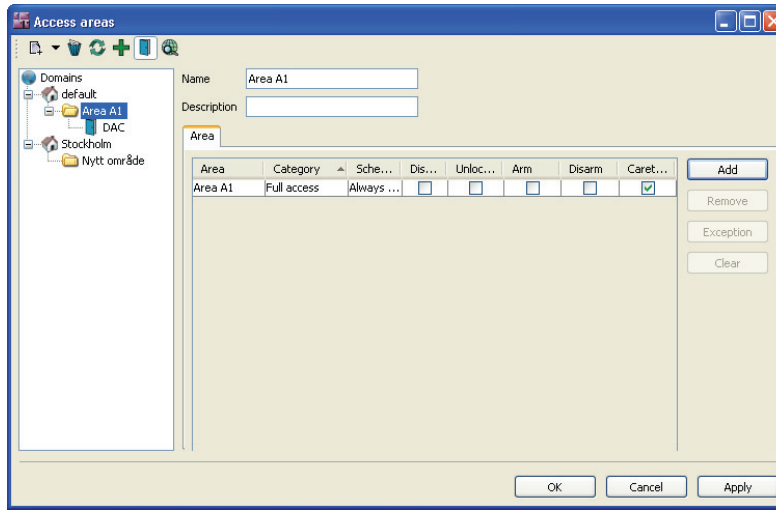


Summary of selections done

7. If the summary is correct, click *Finish*. If you are not satisfied, go to the previous menu with the button <*Back* and add your selections.

On the right side of the window *Access areas,* you can now see that the access category has been added. Note that the access category will only be valid for this particular access area, it will not be inherited by access areas that are located below it.

Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.



Window Access areas with a highlighted access category

For more information on how to work with access categories, see "Access Categories" on page 72.

Door functions

Below is a description of the different door functions that you can add to access categories.

Disabled

The door function *Disabled* gives a person extra time to check in- and out. This means, for example, that the time period elapsing between entering a code and the door unlocking are longer than normal.

Note that in addition to activate this door mode for areas, you must also allocate the corresponding disabled clearance for a person, in the *Person* window.

Lock/unlock allowed

This door function gives a person the right to open a door for a certain period of time.

To open a door via the reader:
Press key 2A – swipe card – enter the number that defines the period the door is to be left open – confirm with A. The numbers 1 to 23 are equivalent to hours, and the numbers 01 to 059 are equivalent to minutes.

Example 1: To keep a door open for one hour:
Press key 2A – swipe card – press 1 – press A.

Example 2: To keep a door open for 45 minutes:
Press key 2A – swipe card – press 045 – press A.

Example 3: To permanently open a door:
Press key 2A – swipe card – press A.
A buzzer sounds when the door is permanently unlocked.

NOTE! If a person only have *Lock/unlock* privilege, the code (to open) is changed to:
Press key A – swipe card – enter time period – press A.

If you wish to cancel the door being kept open before the door control schedule or opening time has expired:
Press key 2B – swipe card.

NOTE! If a person only have *Lock/unlock* privilege, the code (to cancel) is changed to:
Press key B – swipe card.

If you wish to lock a door being kept open by a door control schedule:
Press key 3A – swipe card.

To restore the current door controller schedule:
Press key 3B – swipe card.

NOTE! To be able to unlock a door with card, the door operation mode "Unlock with card" for this door type be active.

NOTE! To be able to lock a door with card the door operation mode “Lock with card” for this door type be active.

NOTE! If you wish to cancel the key sequence, finish by pressing key B (instead of confirming with key A).

Alarm manoeuvre allowed

Gives users in the access category the right to activate an alarm for an area via the reader, using the access card and the PIN code.

The alarm is switched ON in the following way:
Press key B – swipe card – enter PIN code

Disarm manoeuvre allowed

Gives users in the access category the right to deactivate an alarm for an area via the reader, using the access card and the PIN code.

The alarm is switched OFF in the following way:
Press key A – swipe card – enter PIN code.

Caretaker access

Caretaker access can be used, for example, when premises are being hired out and a person needs to be able to reset a reader so that it functions as a coded door lock for a limited period of time. The selected door code will cease to work when the access category validity for the person ceases or when the code lock is manually cancelled via the reader.

A temporary code is activated via the reader in the following way:
Press key A – swipe card – enter code (user defined, e.g. 8567)

To deactivate a temporary code via the reader:
Press key B – swipe card

NOTE! If a person have more than one door privilege, the codes for caretaker access are changed to 1A (activate) and 1B (deactivate) respectively.

Remove access category

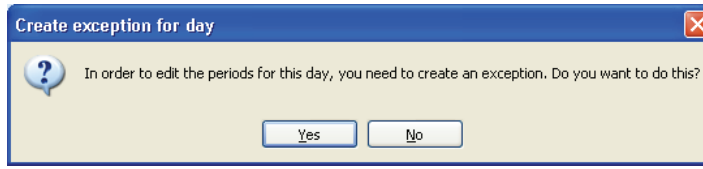
To remove an access category from the area tree structure, do the following:

1. Highlight one or more areas in the area tree structure where you want to remove the access category. (Keep the keyboard's Ctrl-key depressed to highlight more than one area.)
2. Highlight the access category you want to remove and click the button *Remove* on the right hand side of the window.
3. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and do not want to save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Add exceptions for access category

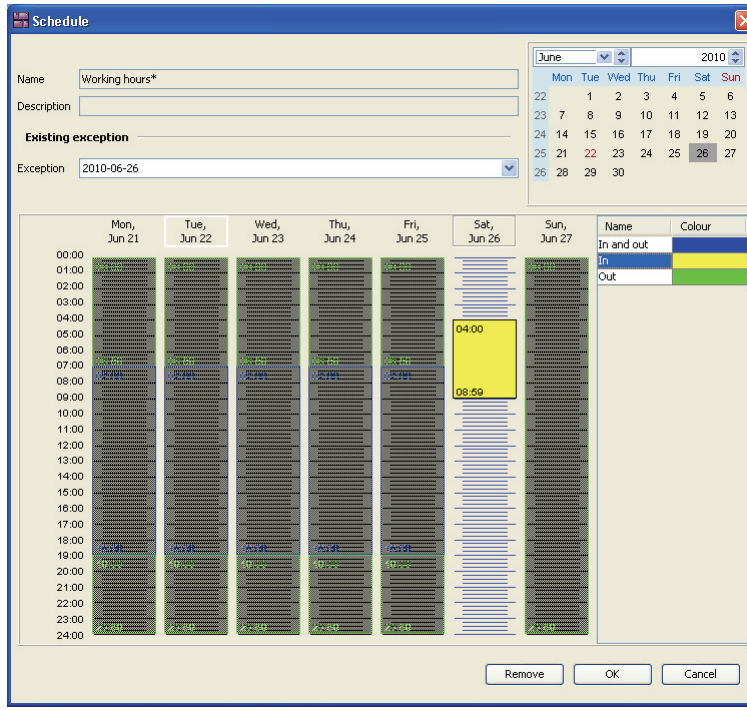
To create exceptions for an access category in the area tree structure, do the following:

1. Highlight the area in the area tree structure that the exception shall apply to.
2. From the tab *Area*, highlight which access category the exception shall apply and click *Exception* in the right part of the window.
3. In the *Schedule*-window that now opens, select the schedule option and the period for the exception. (For more information on how to work with schedules, see "Schedules" on page 110).
4. When the period for the exception is highlighted a query window is shown.


Create exception for day
In order to edit the periods for this day, you need to create an exception. Do you want to do this?
Yes
No

Query window for the exception

5. Click *Yes* if you are sure that this is the exception you want to create and highlight the period that is to apply to the exception.



Window Schedule for an exception

6. Then click *OK* in the window *Schedule* to close this and return to the *Access areas*-window.

7. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

NOTE! When an exception is created this will be indicated in the *Access areas*- window with an asterisk (*).

Clear exceptions for access category

To clear exceptions for an access category in area tree structure, do the following:

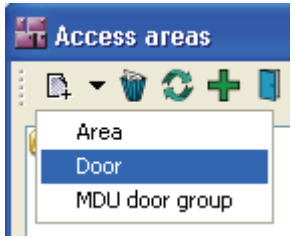
1. Highlight the area in the area tree structure where you want to clear the exception.
2. From the *Area*-tab, highlight for which access category the exception shall be cleared. Then click on the button *Clear* in the right part of the window.
3. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

Add Door

NOTE! To be able to add a door in the area structure, a corresponding DAC must be defined in the *Installation* view. (For more information on how to add a DAC, see "Add connected DAC" on page 222.)

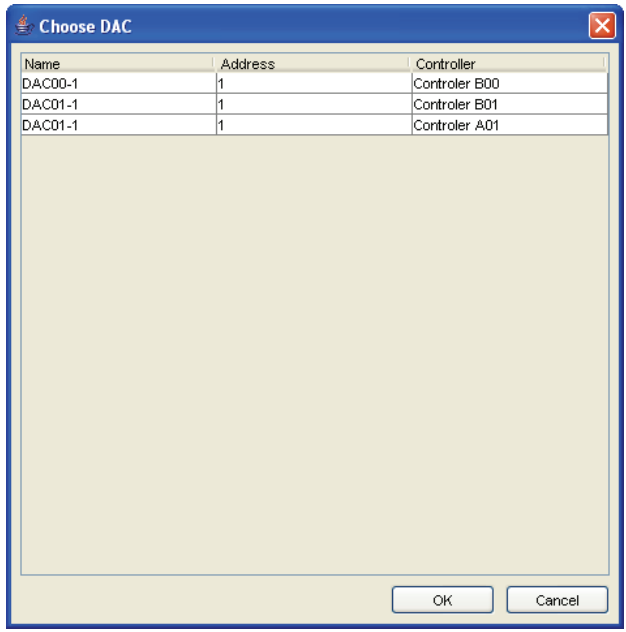
To add a door in the area tree structure, do the following:

1. Right click on the level in the area tree structure where the door shall be located under, and choose *Add*.
2. Then select the option *Add* in the menu bar of the window, and click on *Door*



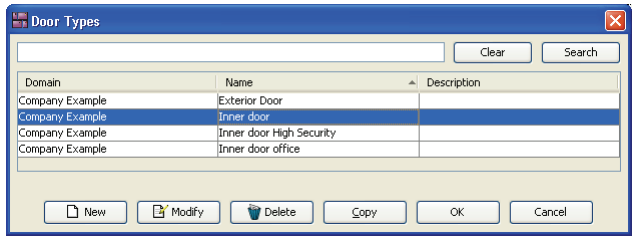
Menu to add door

3. In the window *Choose DAC* that is now shown, select one, or more doors, that are to be added and click *OK*.



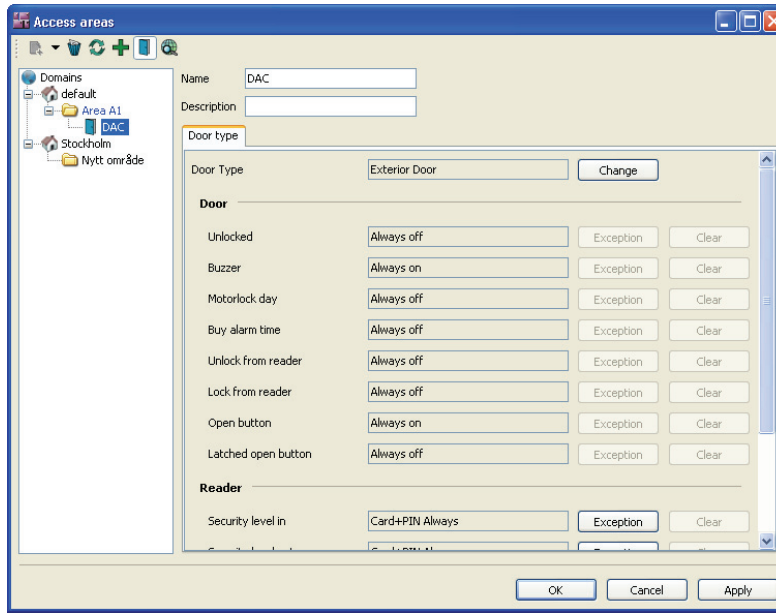
Window Choose DAC

4. In the *Door type* window that now is shown, choose which type of door it is, or create a new door type (see chapter "Create new Door type" on page 166) and then click *OK*.



Window Door type

5. The door is now added to the area tree structure.



Window Access areas with door selected

6. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

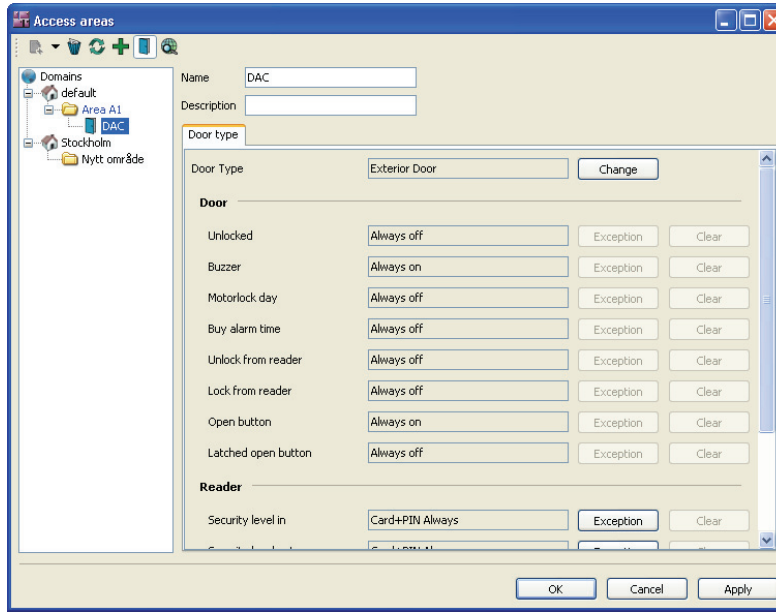
Modify Access Area Settings

To change the settings for an access area, do the following:

1. Highlight the access area in the area tree structure.
2. In the upper right side of the window you can change the *Name* of the area and edit its *Description*.
3. On the right side of the window the settings for the access area are shown. The settings with checkboxes (e.g. *Lock/unlock*) can be altered directly in the *Access area* window.
4. Each of the rows corresponding to an access category can be deleted with the *Remove* button.
5. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window want saving for the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Modify Door Settings

When a door is highlighted in the *Access areas* window, the selected *Door type* and the settings for the door and connected readers are shown to the right.



Window Access areas with door selected

The door modes for the highlighted door are associated with which type of door (*Door type*) this is. Under the tab *Door types* in the *Access area* window the door modes and the door schedules for the door are show.

For some of the door modes, the *Exception* function can be used to define exceptions from overall schedules.

Remove Access Area or Door

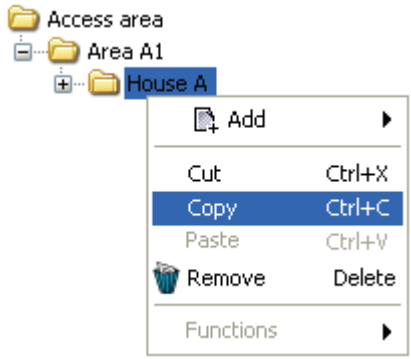
To remove an access area or a door from the area tree structure, do the following:

1. Highlight the object that is to be removed.
2. Then select the menu option *Remove* in the window menu bar.

Copy and Move Access Area or Door

By right-clicking with the mouse on an object in the area tree structure, you can get three extra options that make it easier to copy or move an object in the area tree structure:

- Cut (Ctrl+X)
- Copy (Ctrl+C)
- Paste (Ctrl+V)



Popup menu for Cut, Copy and Paste

It is also possible in the area tree structure to highlight an object, for example a door, and then drag it with the mouse to a new place in the area tree structure. (The result is the same as if you first cut the object and then pasted it into the new location in the tree structure)

Control Function

There is a control function for access areas that has been created to simplify the work required for managing areas and doors, and their different settings and options.

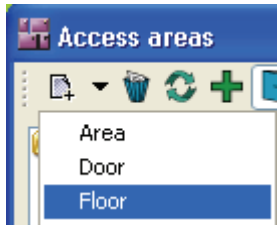
If you highlight several objects in the left hand side of the window *Access areas* (e.g. two different access areas), then the different options and choices that have been made for the two objects are shown on the right hand side of the window. To emphasize any discrepancies, all settings that differ between the selected areas are in this summary greyed out.

Floors (option)

If the optional feature *Elevator* is installed the operator also can add floor levels to the area structure. With this function, you have the possibility in the access areas window to manage access to the floors the elevator serves.

To add a floor in the *Access area* tree structure, do the following:

1. Highlight the level in the area tree structure where the floor shall be located under.
2. Then select the option *Add* in the menu bar of the window, and click *Floor*



Menu to add floor

3. In the window *Choose floor* that now is shown, select one, or more floors, that are to be added and click *OK*.
4. Next step is to choose door type for the floor(s), in the *Door type* window that now is shown, choose which type of door it is and then click *OK*.
5. The symbol for the new floor is now added to the area tree structure in the left side of the *Access areas* window. Shown to the right side are the fields *Name*, *Description* and the tab *Door type* with settings for the door.

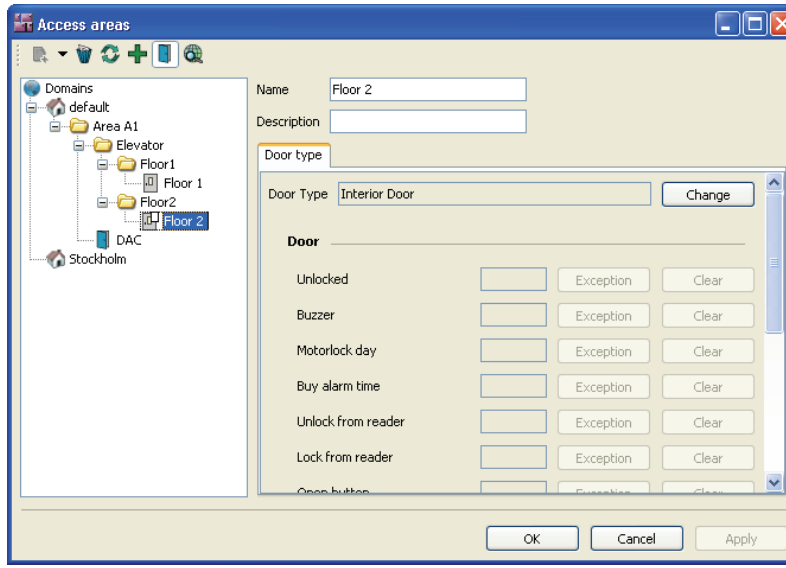
There are two icons symbolizing floors in the access area tree structure. This to make it easier to determine if the floor is linked to a floor-specific DAC, or not.

Floor icons, With DAC (left), No DAC (right)

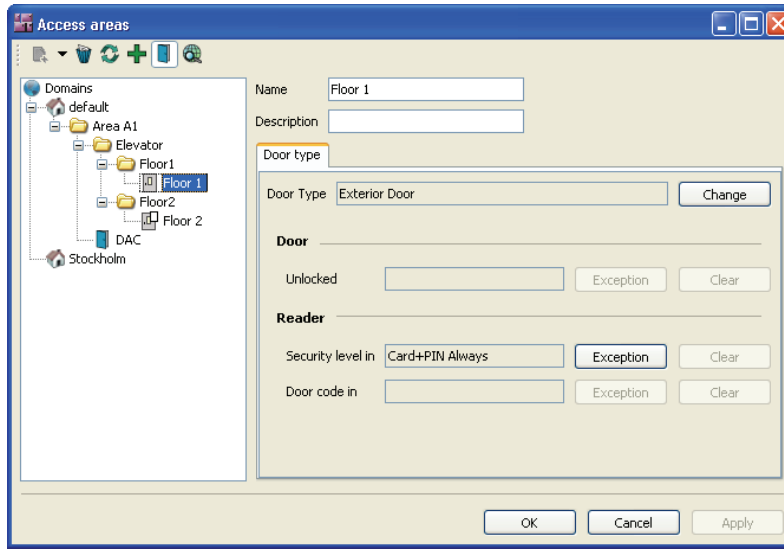
When a floor is highlighted in the *Access areas* window, the selected *Door type* and the settings for the door and connected readers are shown to the right.

The door modes for the highlighted door are associated with which type of door (*Door type*) this is. Under the tab *Door types* in the *Access area* window the door modes and the door schedules for the door are show. (The number of alternatives on the *Door type* tab differs for floors with DAC and for floors without DAC.)

For some of the door modes, the *Exception* function can be used to define exceptions from overall schedules.



The Door type tab for floor with DAC



The Door type tab for floor without DAC

Domains (option)

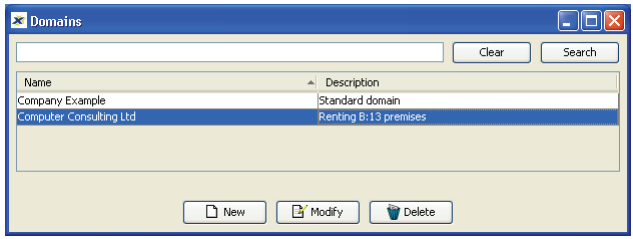
The *Domains* option allows you to edit Domains in the *System* menu.

Domains act as a superior level to the Access areas and can be useful if your company has more than one office and a decentralized administration of ARX access control system for each office is desired.

Add domain

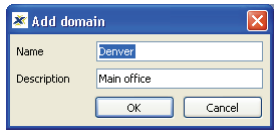
To add a new domain, do the following:

1. Select the *System* menu in the main window and choose the *Domains* option..



The Domains window.

2. In the *Domains* window, click *New*.



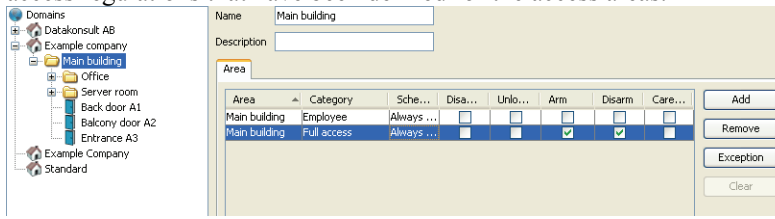
The add domain window

3. Write Name and Description and click *OK*.
4. To edit the name and description on already created domains, click *Modify* in the main window.
   To remove domains, click *Delete* in the main window.

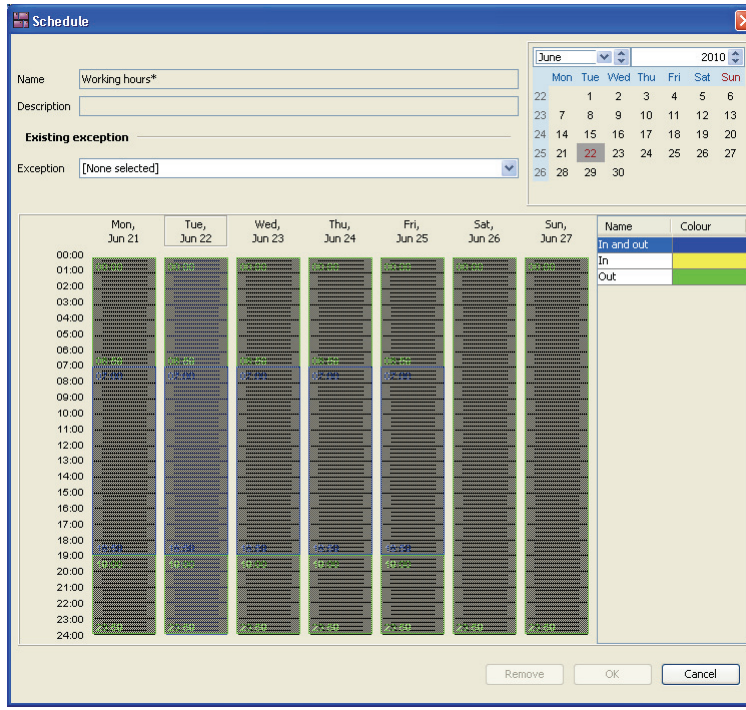
Examples

A party during the evening – altered access

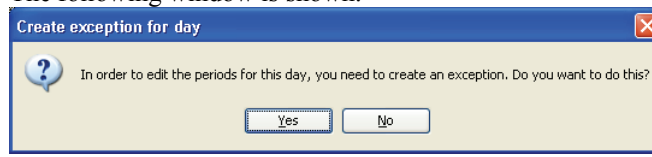
In the following example the employees are going to have a party on Saturday the 1st of October. They are therefore permitted to have access to the main entrance between 18.00 hours and 23.00 hours on that day. Therefore an exception has to be made from the access regulations that have been defined for the access areas.



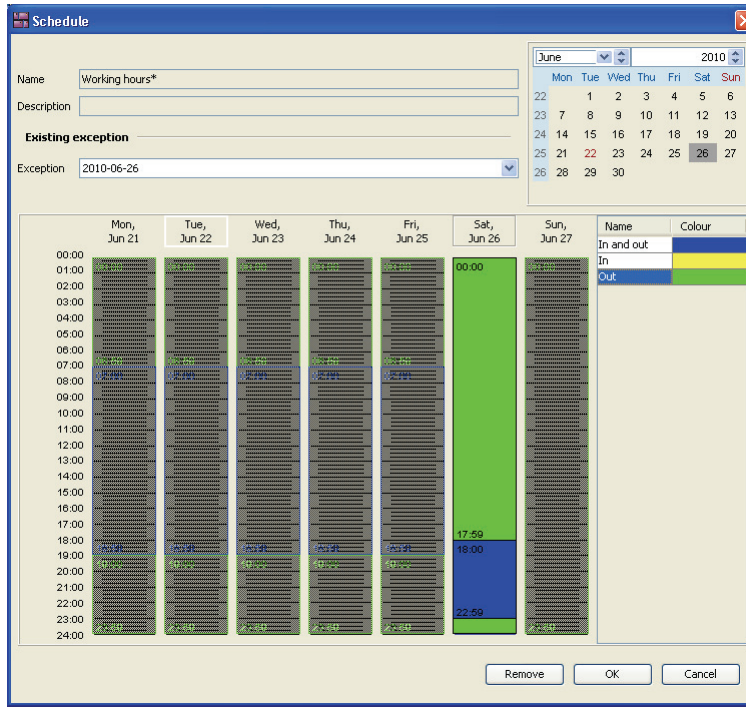
1. Begin by selecting Shell protection and employee as above. Click on *Exception*. The Schedule window opens.



2. Go to the correct week and double-click on the relevant date. The following window is shown.

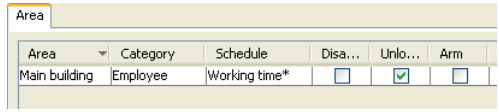

Create exception for day
In order to edit the periods for this day, you need to create an exception. Do you want to do this?
Yes
No

3. Click on *Yes*. Then add the rights of passage for entering and leaving the building between 18.00 hours and 23.00 and out at other times.



4. Click on *Ok*.

The asterisk shows that there is an exception for this access category in this access area.



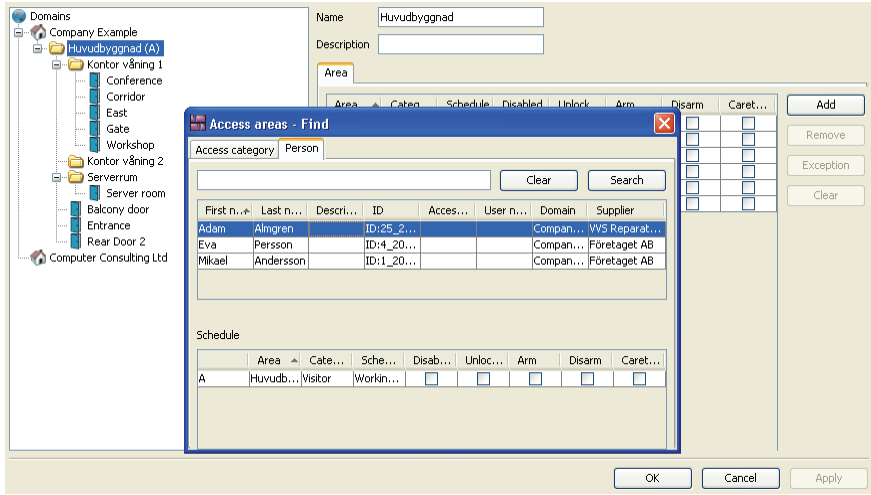
Delete the exception

To delete the exception click on *Clear*.

See which access areas a person has access to

In order to see in which areas a person or access category has access, you can use the search function. Click on this symbol:

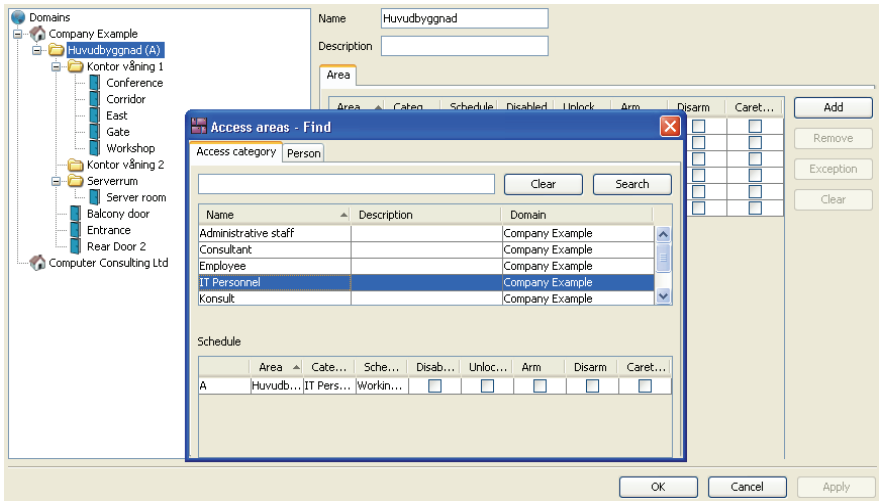
In the window that opens and under the tab, *User,* you can mark a person and directly in the access tree see where they have access and according to which schedule.



See in which access areas an access category has access

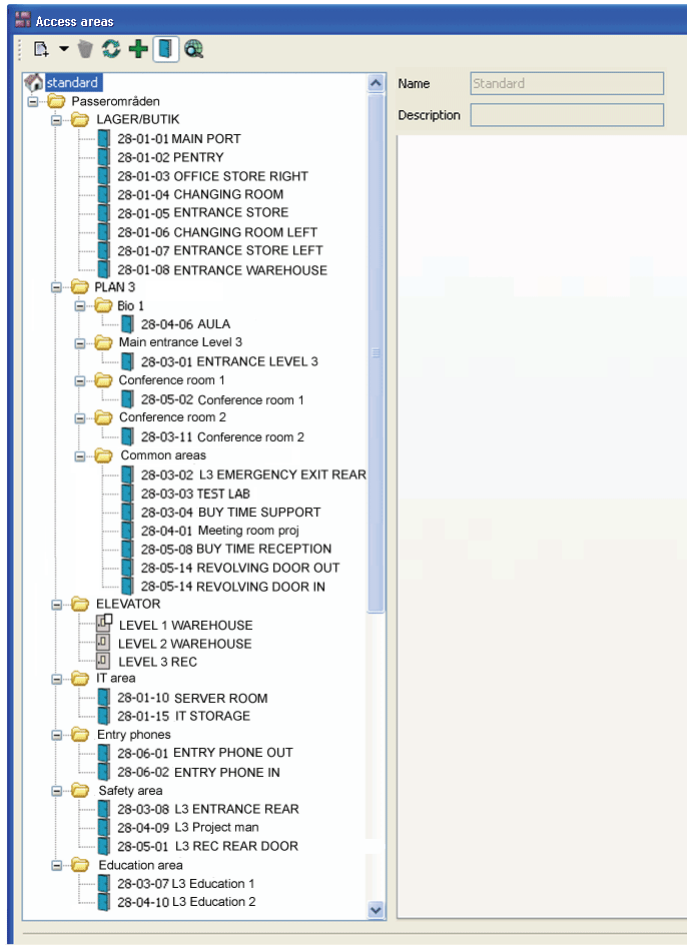
In order to easily see where a person or access category has access you can use the search function. Click on this symbol:

In the window that opens and under the tab access categories you can mark a category and see directly in the area tree where this category has access and according to which schedule.



The Company Example configures the access areas

The picture shows the access areas for the Company Example:



The Company has 3 floors, a storage room, a shop and an office.

Explanation and comments to the configuration of the access areas of the Company Example:

- **Floor 3's layout:**
  All the different functions in the office on floor 3 are in separate access areas. The entrance door and common areas are basic access areas for all employees.

- **Tree structure**
  The tree structure can be used to separate different floors or to visually show that an area has an underlying access area. (Access must be set separately for all access areas, independent of its level on the tree structure).

- **Separate access areas for top security**
  Always create separate access areas for the premises that require a higher level of security, for example a server room or storage room.

- **Begin with many access areas**
  By defining many access areas during configuration it is possible to have a greater flexibility when deciding more exact access rights for the company's employees.

- **Explanation of the door controls called Buying time:**
  The doors hat are called, for example, "Buying time reception" do not have any locking function but they are just readers that can delay activation of the alarm.

- **Explanation of the Elevator access area**
  By delegating the doors that are connected to the elevator doors to their own access area, it is possible to decide which access categories are permitted to use the elevators.

- **Explanation of the Entry phone access area**
  By delegating the door function for the entry phones to their own access area, it is possible to decide which group of users are exempt from using the entry phones when entering the building.

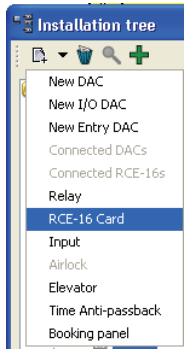
The Company Example installs an elevator

When an elevator is installed in the access system, a specific hardware installation, and several other measures must be taken in the access area tree.

A RCE-16 card must be installed in connection to the elevator. A card reader must also be installed in the elevator. The Company Example will also have a door function connected to floor 1 for increased security.

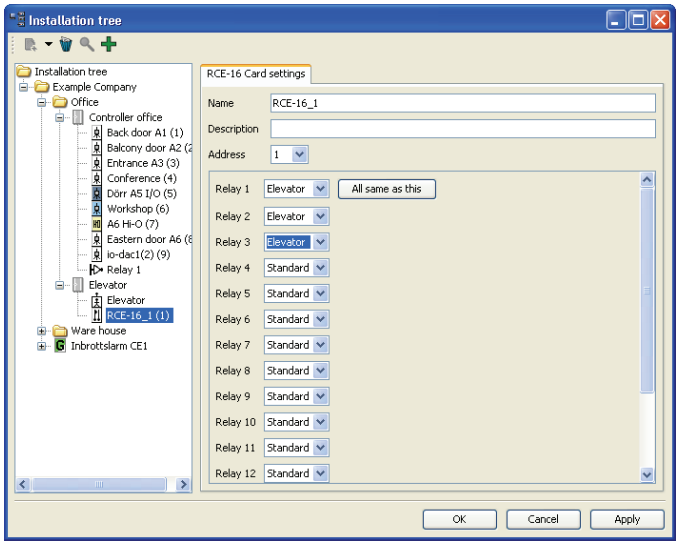
The Elevator option must be installed at the configuration of the ARX Access system. The configuration starts in the installation tree:

1. Mark the control units in the installation tree that the elevator's RCE-16-card is connected to.
2. Then add the *RCE-16 Card*. (An RCE-card must be connected to every elevator.)



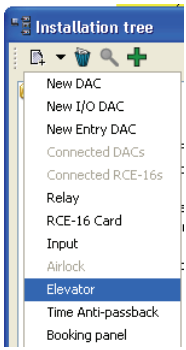
Add a RCE-card

3. Under the tab Properties, name the RCE-16-card and mark the relays that are to be connected as "Elevator".



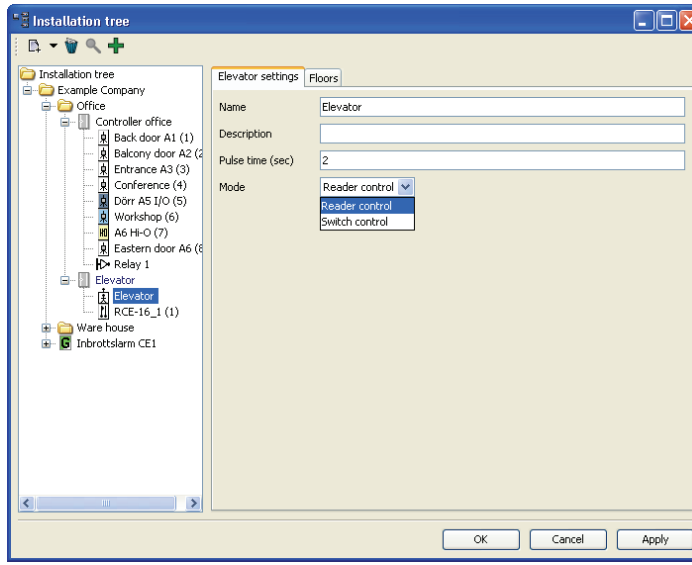
The Installation tree with the RCE-16 card marked

4. Afterwards “Elevator” must be added to the installation tree. Select *add* and click on *Elevator*.



Menu to add Elevator

5. Under the tab elevator properties, select if the elevator should be *Reader controlled* or *Relay controlled*.



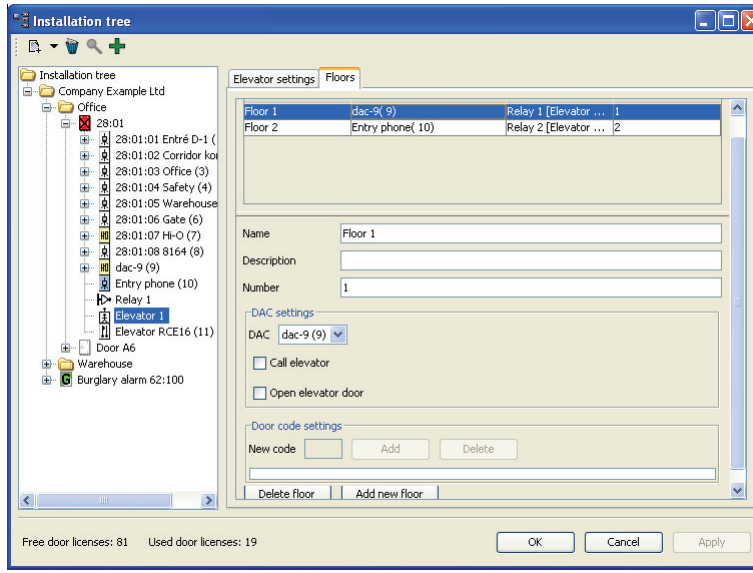
The Installation tree with Elevator marked (The Elevator property tab)

The difference between the *Mode*-alternatives, *Reader controlled* and *Relay controlled* elevator are the following:

- Reader controlled elevator means that the visitor first has to press the button for the relevant floor and then swipe their card.
  If they do not have the authority for the chosen floor, the reader will show a red alert and the elevator will not move.
- The Relay controlled elevator means that the visitor first swipes their card, then the system will light up the lamps/buttons for the floors the visitor is permitted to visit (has the authority to access).

When an elevator is added to the *Installation tree,* several accompanying floors are automatically created based upon the number of relays specified as elevator relays under item 3.

6. Go to the tab Floors, and add the door control dac-9 (9) to floor 1.
   Also check the ”open elevator door”, which means that the door unlocks when you have a granted access on the elevator reader.
   If you also want that a granted access on the floor reader will result in that the elevator is called, check the ”call elevator”.

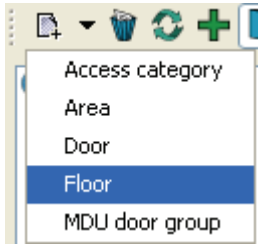


Floor 1 will have the door control dac-9(9) connected to it.

7. Add an in-reader for entering the elevator from floor 1 and an out-reader for the elevator doors’ door control (dac-9(9)). A reader is placed inside the elevator that controls access for entering. The reader on floor 2 manages the leaving of the office. (During the day it should be open, but at night a card is required in order to come out).

Now all configurations in the Installation tree are ready. It is now time to configure the access areas, where floors are to be added.

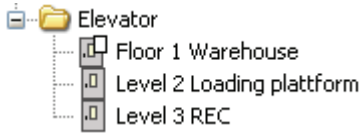
8. In the access areas we select a new access area to be called ”The elevator”.
9. Then select the alternative *Add* in the window’s menu bar, and click on *Floor*.



The Menu for adding a floor

10. The next step is to select the door type for the floor. In the *Door type* window that opens mark ”Interior door”.
11. The symbol for the new floor is now added in the access area tree to the left. Observe the symbol that shows that a door control is connected to floor 1.

This is how it looks when all the floors have been added:



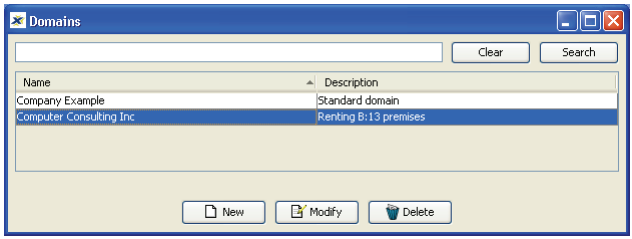
The Symbol for floor 1 shows that a door control is connected to the elevator door on floor 1.

Floor 1 will have the same operation modes as other doors in the system, whilst the other floors will have a limited number of functions.

The Company Example introduces domains

The Company Example has decided to lease unused premises to Computer Consulting Inc.

1. The manager responsible for the Company Example's access system installs a domain function and adds two domains, one for The Company Example and one for Computer Consulting Inc:



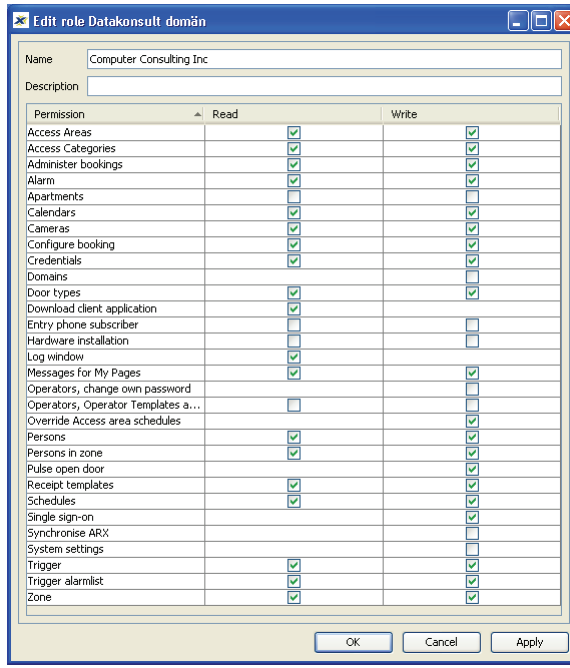
The Company introduces domains when they lease premises to Computer Consulting.

In Computer Consulting's own domain it is necessary to create their own:

- Cards and Users
- Access categories
- Access Areas
- Schedules
- Calendars

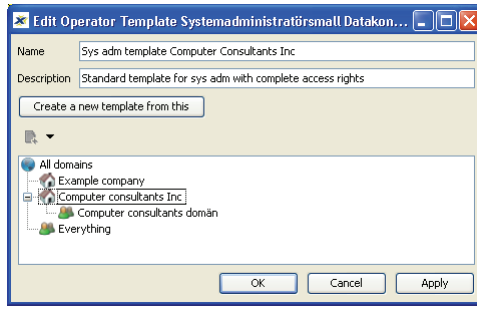
Therefore the following installments must be done when the domain is created:

2. A new role is created for Computer Consulting (*System –Roles*).



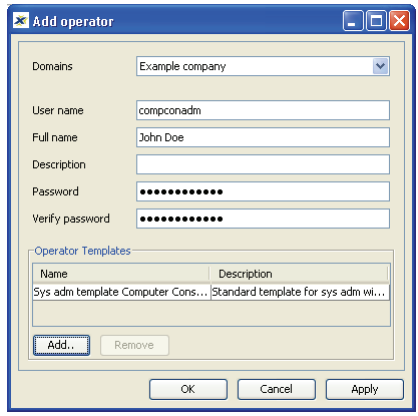
The Role for Computer Consulting has the read rights to the hardware installation, in order to be able to add its own access areas. The Company retains the responsibility for the installation (and therefore owns both the read and write rights.)

3. A new operator template is now created for Computer Consulting Inc, which is only valid for this domain (*System-Operator templates*).



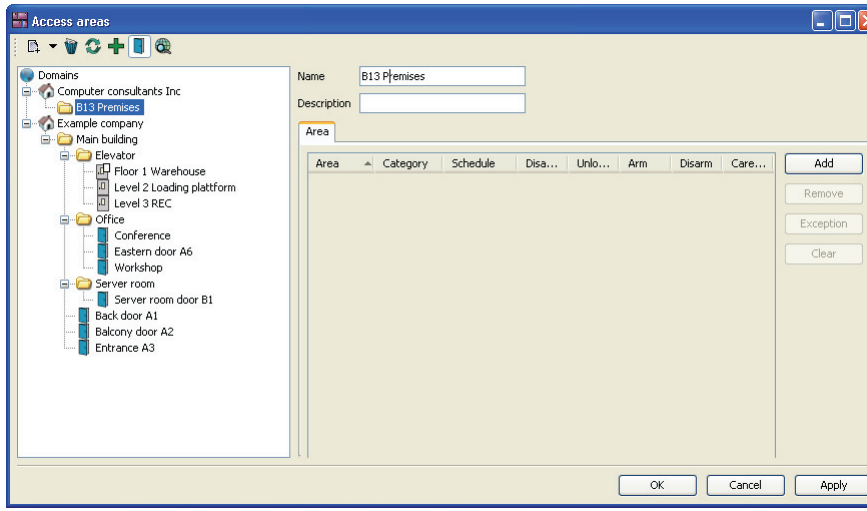
The Operator template, whose rights are determined by the Role above, only valid for the Computer Consulting Inc domain.

4. Then an operator is created for Computer Consulting. (*System – Operator*), which then can continue with the remaining configuration of the Computer Consulting's domain.



The Computer Consulting's new operator is attached to the operator template that was created at the previous step.

5. As a last step, the access areas for the premises that the Computer Consultants are going to lease are moved to their domain.



The Annex that was previously under The Company Example's domain is now moved to the Computer Consulting's domain.

Everything is now ready for Computer Consulting Inc to administer the system themselves.

The Computer Consulting Inc have their own broadband solution and they are therefore given a secure connection, (by the person responsible for service at The Company Example) in order to communicate with the ARX Server. Now they are all set up and able to freely decide how they want to design their own access areas, authorities, schedules etc.

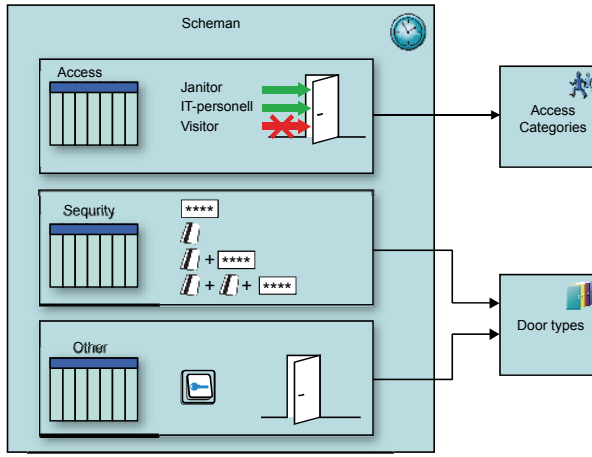
The administrator of The Company will not see any difference in the ARX Client software.

Door types

About Door types

Templates are defined door types, which are used to decide the specific security levels and operation modes that are assigned to a specific door.

The characteristics of the door types are decided partly by the security schedule – what is required for the door to be opened, for example, code and card, and partly by additional schedules that control the door's operation mode (for example the exit button, or the possibility of setting the door unlocked).



The Security schedule and the additional schedules determine during which times a certain security solution applies and when a specific operation mode is active.

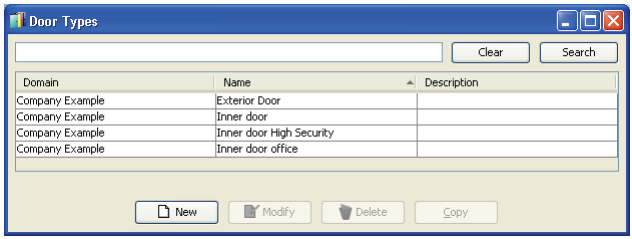
Door types are used in an access area. When a door is added to an access area, it is necessary to choose a door type in order to determine how the door will work.

In addition to the default door types *Interior* and *Exterior door* it is possible to create additional door types that are customized for a certain installation.

Create new Door type

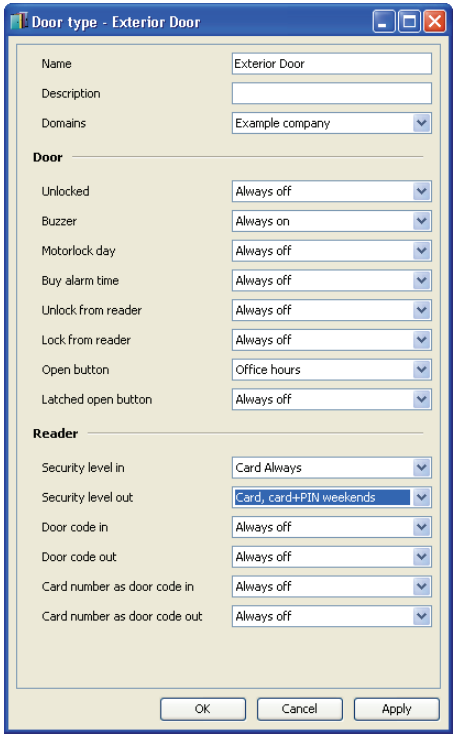
To create a new door type, do the following:

1. Click on the *Door type* button in the main window.
2. In the *Door types* window, click on the *New* button.



Window Door Types

3. In the separate window that now opens, set the desired door and reader settings for the new door type.



Window for Door Type

4. For each parameter for a new door type, a default value is shown. This value is changed by choosing a new schedule in the menu.
5. Back in the Door type window, click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window want saving for the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

For all door parameters except two, is it possible to choose between the alternatives: *Always off*, *Always on* or any of the *Other schedules* that are available in the system. (For more information on how to work with schedules, see "Schedules" on page 110.)

For the two door mode parameters *Security level in* and *Security level out* you can choose between the different security schedules available in the system. (For more information on how to work with schedules, see "Schedules" on page 110.)

A description of functions
(A schedule determines during which times a function is valid):

- **Unlocked**
  When the door shall be unlocked.
- **Buzzer**
  On and off. After a certain amount of time (according to the settings in the installation tree) a warning signal sounds if a door is open.
- **Automatic lock daytime**
  When the door should be locked with both the ordinary and the motor lock.
- **Buy alarm time**
  When it is possible to buy alarm time at the door. Note! Does not apply to Galaxy alarm zone.
- **Unlock with a card**
  When it is possible to set the door unlocked by using a card in the reader.

- **Lock with a card**
  When it is possible to lock the door with a card (on the condition that the door type is installed to be unlocked during some time of the day) – or that it is possible to unlock the door.
- **Opening switch**
  When the exit button should be activated.
- **Level triggered exit button**
  Normally the door is unlocked for 6 seconds, with a level triggered exit button activated the door is unlocked as long as the exit button is pressed.
- **Security level In**
  Choose between the existing security level schedules for entering that are available.
- **Security level out**
  Choose between the existing security level schedules for exiting that are available.
- **Door code In**
  When a door code for entering shall be active.
- **Door code Out**
  When a door code for leaving shall be active.
- **Card number as door code In**
  When the card number is to be used as a door code when entering**.**
- **Card number as door code out**
  When the card number is to be used as a door code when leaving**.**

NOTE! If a card number should work as an door code you must both set the parameter *Card number as door code in* or *Card number as door code out* and create an matching card format. This card format should be of the type *Manual PIN*.

NOTE! The operation mode ”Unlock with card” and ”Lock with card” only works in combination with the security level Card, not with Card+PIN.

Modify Door type

To change the settings for a door type, do the following:

1. Click the *Door type* button in the main window.
2. Highlight the door you want to change in the *Door type* window and click *Modify*.
3. Change the parameters for the door type in the separate window that now opens.
4. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window want saving for the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Delete Door type

1. Highlight the door you want to remove in the *Door type* window.
2. Click the *Delete* button.

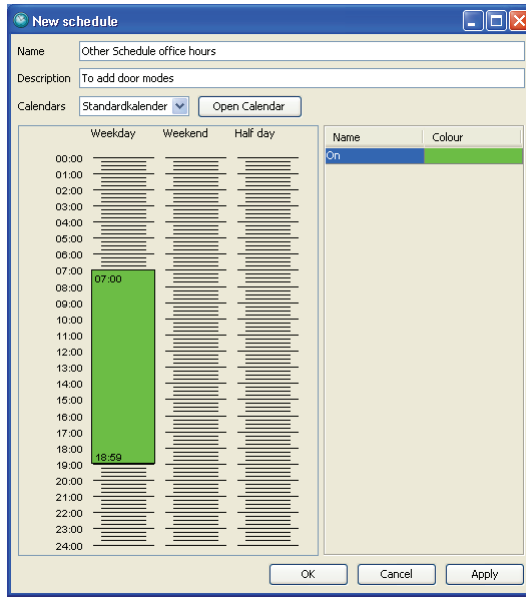
Examples

Create a door type where the validity of the exit button can be changed

The Company Example wants to create a door type with an exception for when the exit button (or other operation modes) are relevant.

First of all an additional schedule must be created to control when the exit button is active. A basic installation is to select office time between 07.00-19.00 hours.

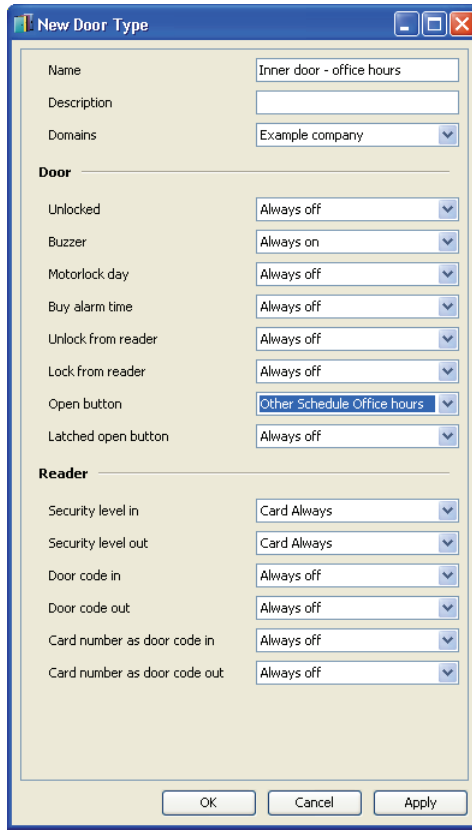
1. Open the main window for Schedules, click on the tab *Additional Schedules* and click on *New*.



Additional schedules set to be active during office hours

2. Click on finish and then open the main window for door types and select *New*.

3. Change to *Additional schedules office time* that you previously created for the *Exit button* and press *OK*.



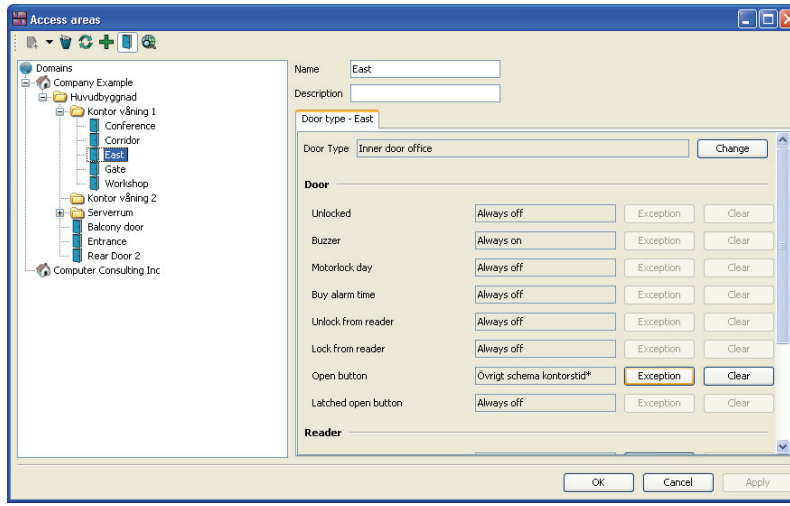
A New door type where the exit button only works during office hours

Thus the opening switch is now active only during office hours, between 07.00-19.00 hours.

In the access areas it is now possible to add an exception for when the exit button should function. For example, if there is a company party it should function up until midnight:

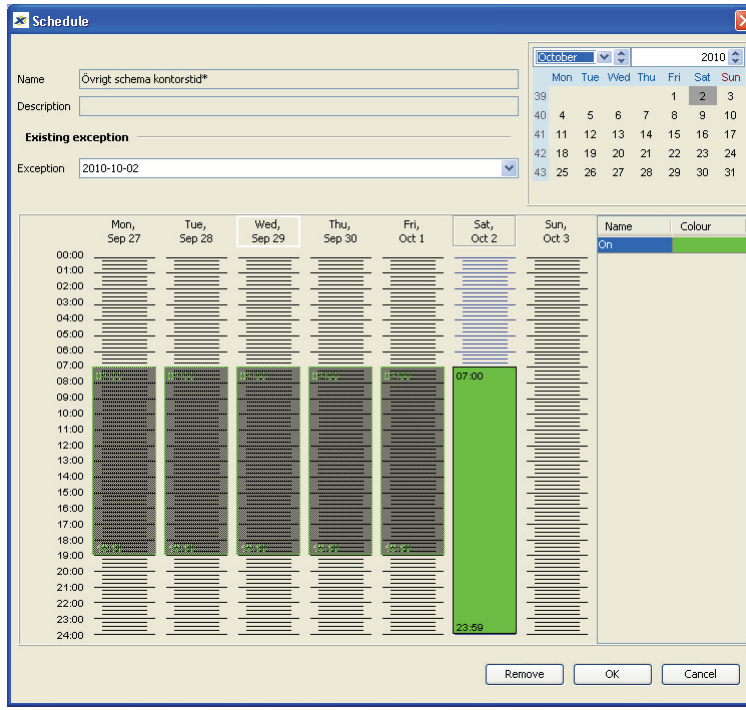
4. Go to the main window for *Access areas*. Then go to the door that you want to add an exception to and click on

Change door type. Then select the new door type that was created above.



Door type – Office hours makes it possible add an exception for how the exit button should work.

5. Then click on *Exception* in order to change the time for the exit button.



An exception so that the exit button will be active up until midnight

Triggers

About Triggers

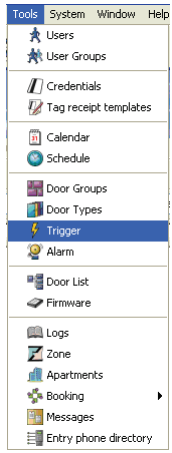
The trigger functionality allows you to supervise the hardware or the software in the access control system. A trigger can be used to activate other actions in the system.

For example, a trigger can be used to turn on the lights in the office corridor when the corridor door is opened, or to send an email to somebody if a certain door is not closed correctly.

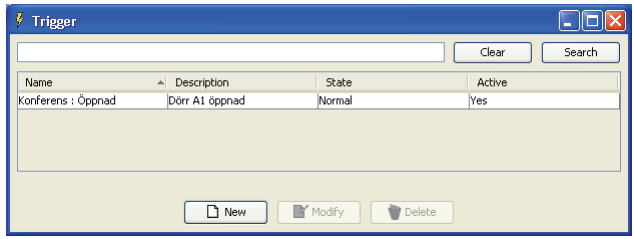
Add trigger

To add a trigger, do the following:

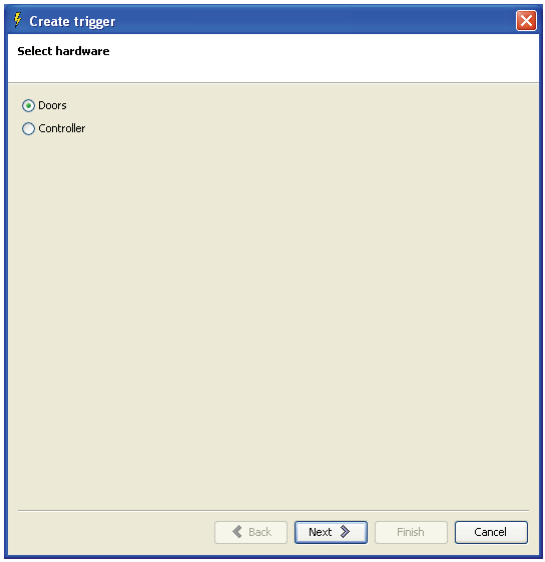
1. Choose *Trigger* in the Tools menu.



2. Choose *New* to create a new trigger.



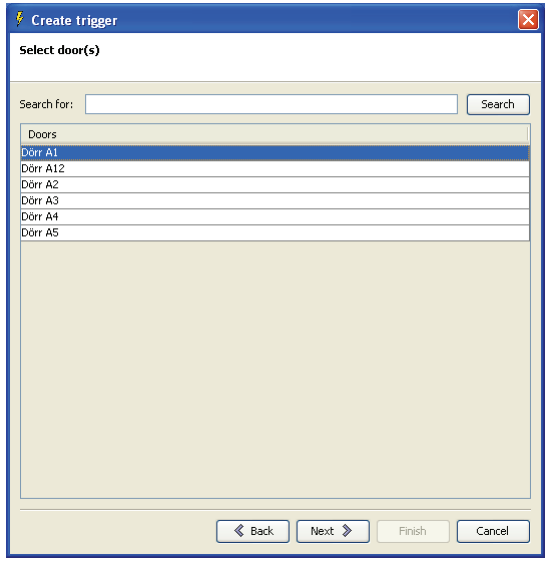
3. Choose the hardware or filter template to be supervised and click *Next.*



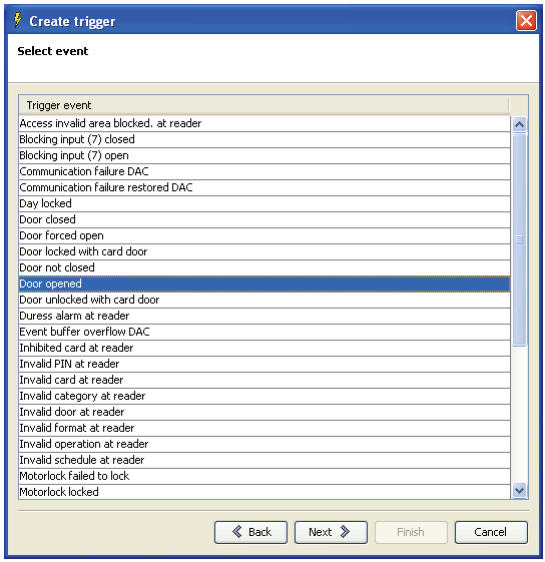
The description below applies for a door trigger, but this principle also applies for RCE-16-cards and controllers. See “Add filter template as trigger” on page 183.

4. The door controllers in ARX are shown. Using the *Search* function (only for door controllers) you can find a door by writing the beginning of the name of the door. .
(Remove the search word and click *Search* to return to the complete list.)

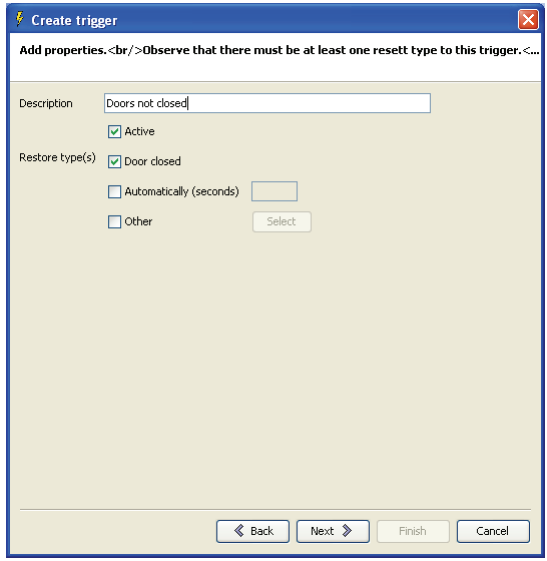
   Highlight one or several doors in the list and click *Next.*



5. The list displays all events available to trigger. Choose desired event and click *Next*.



6. Choose the properties for the trigger.



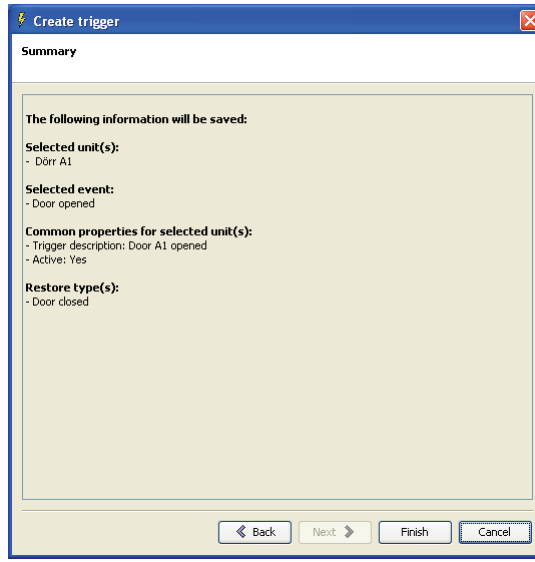
Restore types:

- **Door closed**
  The trigger is deactivated when the door is closed. (Greyed out when non-applicable events are used.)
- **Automatically (seconds)**
  Enter the time in seconds for when the trigger will be deactivated.
- **Other**
  Check *Other* to choose another event that will act as deactivation of current trigger.

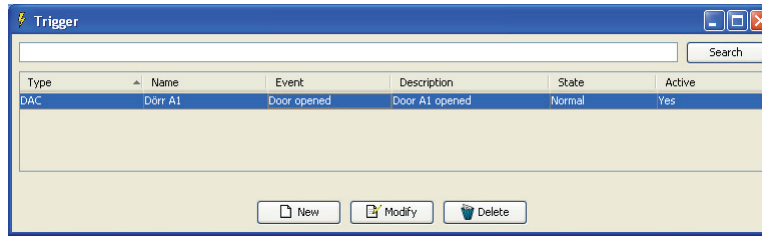
Enter a description and check *Active* to make the trigger active. Finish by clicking *Next.*

Note! At least one restore type must be marked.

7. A summary of the properties of the trigger is shown. Check that the properties are correct and click *Finish* to save the trigger.



8. The new trigger is shown in the trigger list:

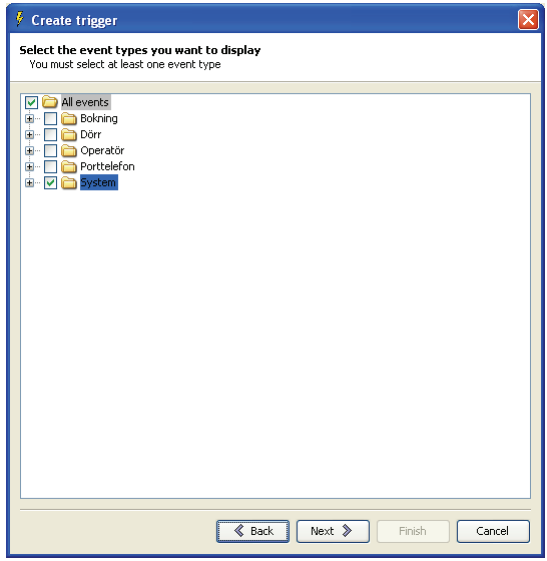


In order for the trigger to result in another event to happen, for example that the corridor lights are turned on when a door is opened, an *Action* needs to be added, refer to next chapter.

Add filter template as trigger

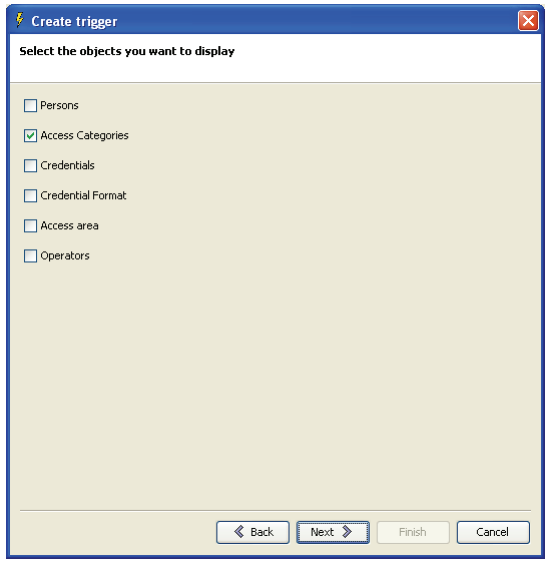
Filter template is used in order to create a trigger for events in ARX server software, for example to monitor all events performed by a certain administrator, or when a domain is modified.

1. Select on or several events to be included in the trigger and click *Next*.
   (Each event will alone activate the trigger)

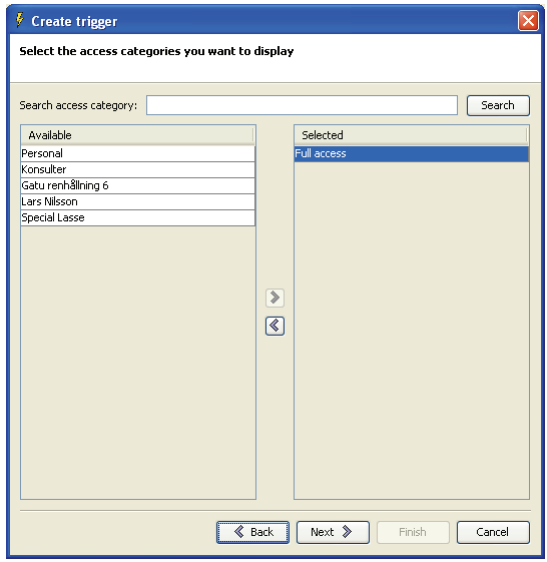


2. If you want the filter template only applicable for a certain object, perform the following steps:

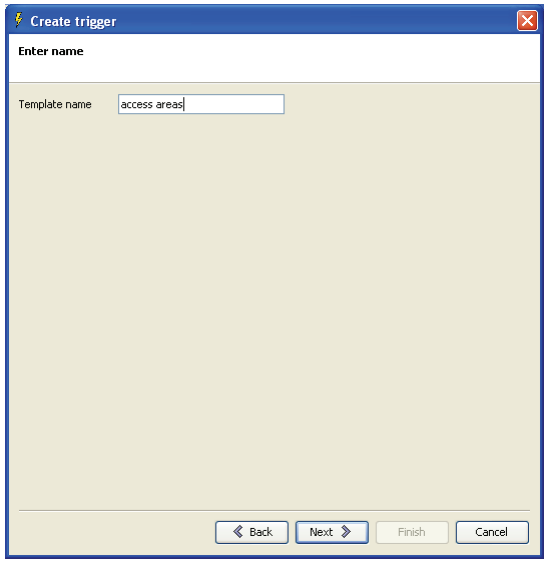
   - Check the object you want the filter template to react for, in this example, access categories.



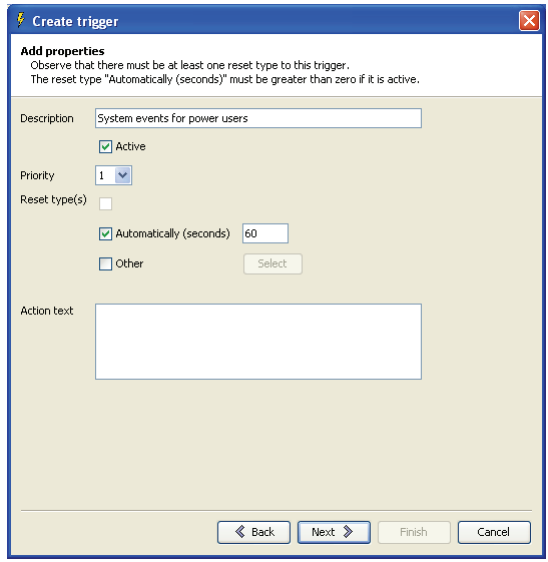
- Select the access categories to be supervised.



3. Name the filter template.



4. Choose the settings for the trigger



Restore types:

- **Door closed**
  The trigger is deactivated when the door is closed. (Greyed out when non-applicable events are used.)
- **Automatically (seconds)**
  Enter the time in seconds for when the trigger will be deactivated.
- **Other**
  Check *Other* to choose another event that will act as deactivation of current trigger.

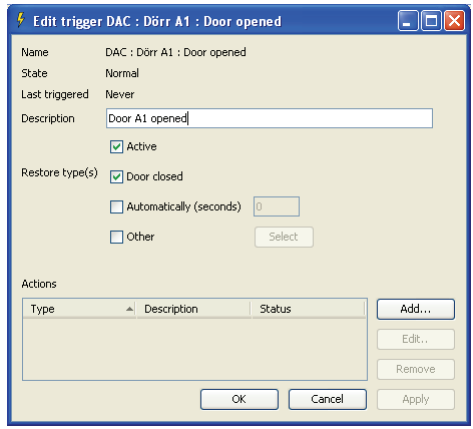
Enter a description and check *Active* to make the trigger active. Finish by clicking *Next*.

Note! At least one restore type must be marked.

Modify trigger

To add an action to a trigger or change the properties, do the following:

1. Choose *Modify* for the trigger.



2. Change desired properties and press OK, or continue to add an *Action* for current trigger.

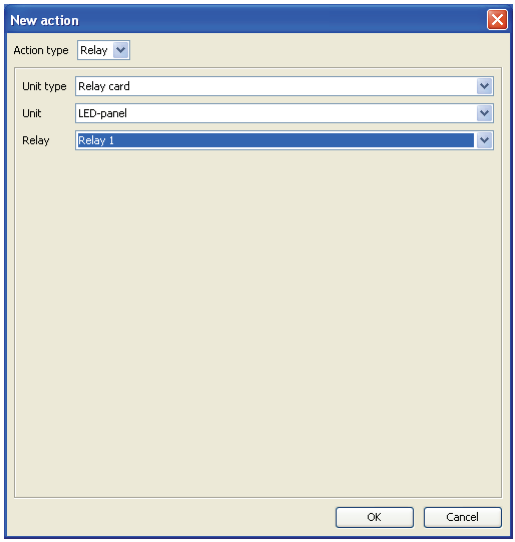
Add action

In order for the trigger to result in other events, for example that the light is turned on through a relay, that an email is sent, or that a desired software is started, an *Action* must be added.:

Click *Add in the Actions* section to add an action, *Relay*, *E-mail or Server application*.

Relay action

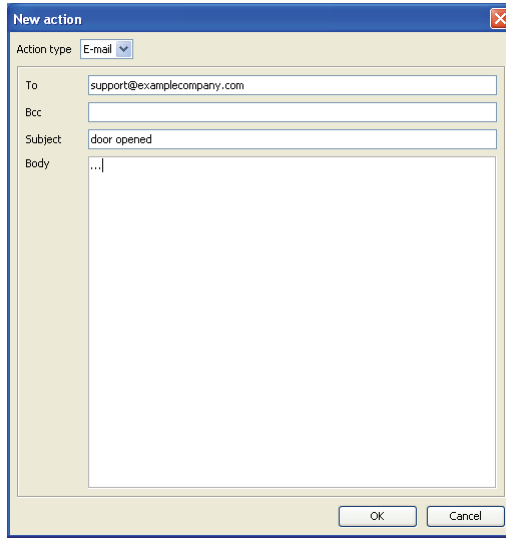
Choose *Relay* as *action type* and set the relay type to *Relay Card* or *Door* (the relay function of a DAC) and *choose* the relay to be connected to this function in the *Unit* menu. Finally choose the relay output on current relay unit and click *Ok*.



A trigger can have any number of relays as action.

E-mail action

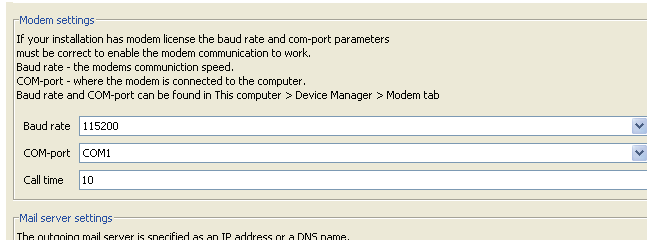
Choose E-mail as action type and write a template for the mail to be sent when the trigger is activated. Then click *Ok*.



A email action can send any number of e-mails.

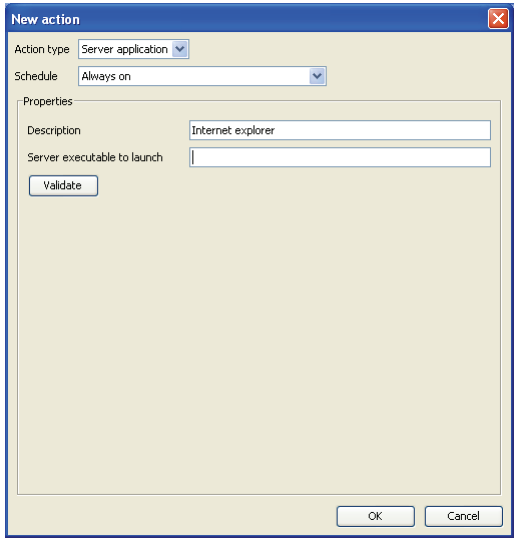
Note! To be able to send e-mails, ARX must be connected to an existing e-mail account.

This is configured in ARX Server Manager, in *File-Change system properties.* Scroll down to Mail server settings.


Modem settings
If your installation has modem license the baud rate and com-port parameters
must be correct to enable the modem communication to work.
Baud rate - the modems communiction speed.
COM-port - where the modem is connected to the computer.
Baud rate and COM-port can be found in This computer > Device Manager > Modem tab
Baud rate
115200
COM-port
COM1
Call time
10
Mail server settings

Server application as action

3. Choose *Server application* as Action type and choose which application to be started in the *Properties* field.



4. Click *Validate* to check that the search path is correct. Finish by clicking *OK*.

Note! For this function to work you need to make sure that the ARX Access Server can interact with the desktop. Check this in the Services application in Windows. (Control panel – administrative tools, open Services and enter the *properties* for ARX Access Server, click the *Log on* tab.)

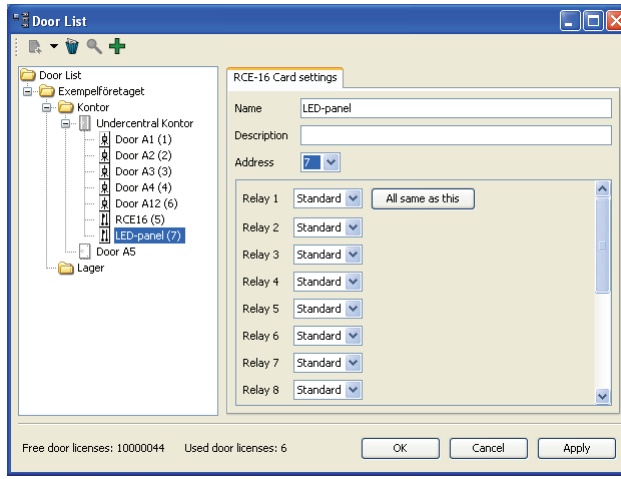
Example

LED-panel that shows unclosed doors

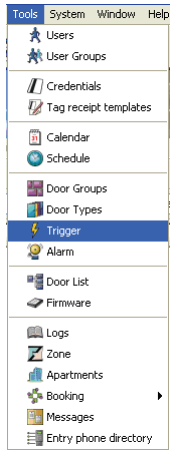
The Company Example wants to use the trigger functionality to control a panel with LED:s that indicates if a door in the access control system is open. At night when the last person leaves the office and activates the alarm, the LED-panel displays all the doors that are not closed.

After installing a RCE.16-card, it is added to the Door list.

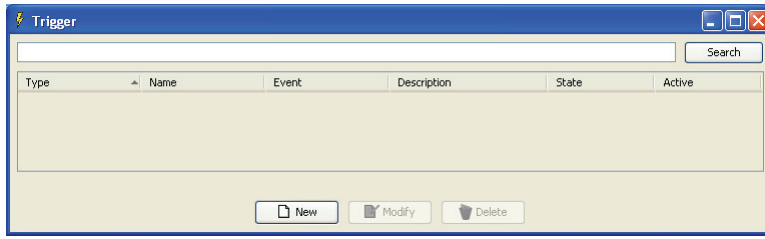
1. Choose *Door list* in the tools menu.
2. The RCE-16-card is added to the office controller.



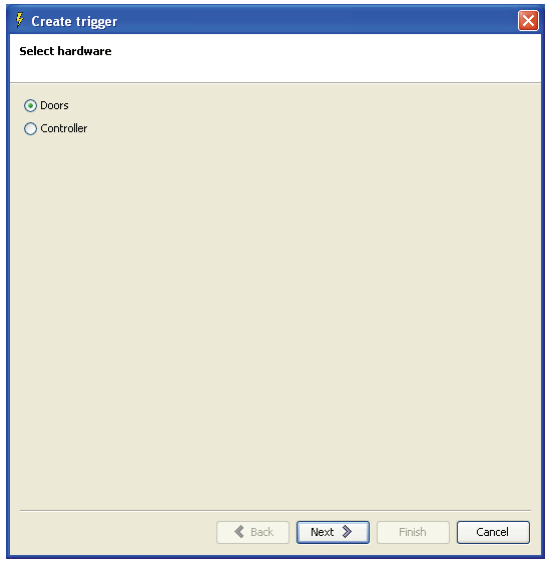
3. After this the trigger is created. The trigger main window is entered.



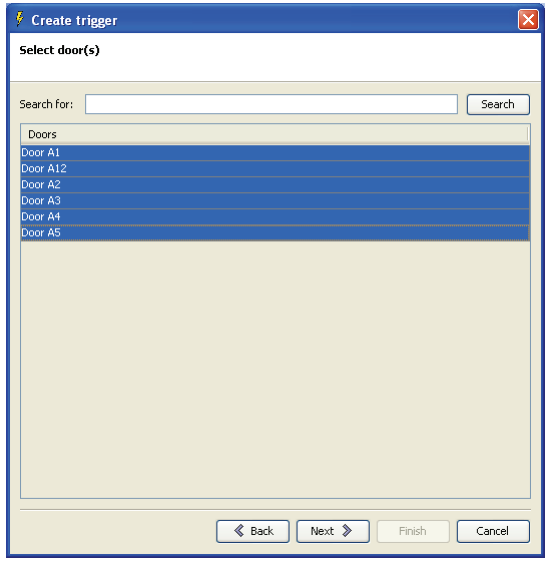
4. A new trigger is created by clicking *New*.



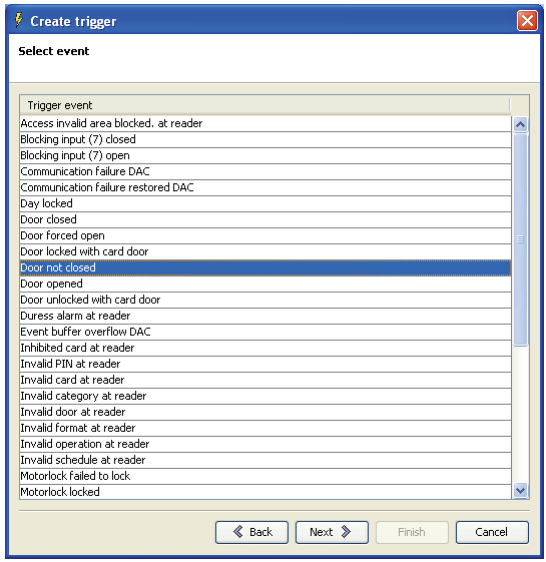
5. The trigger applies for doors.



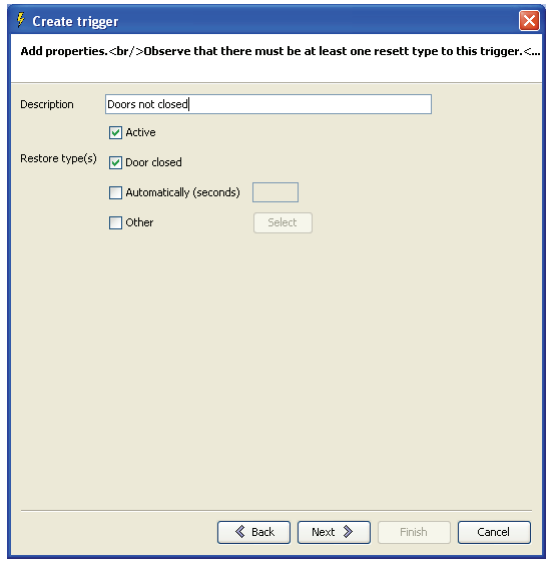
6. All doors that is covered by the trigger is highlighted.



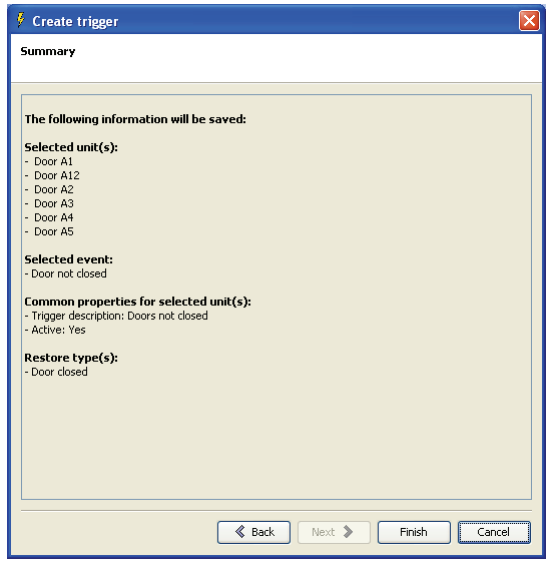
7. *Door not closed* is chosen in the list.



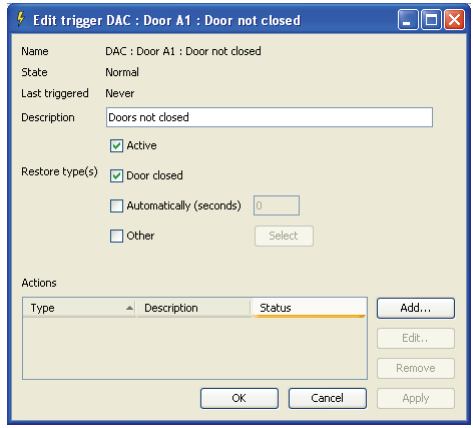
8. The trigger is named and *Door closed* is chosen as *Restore type*.



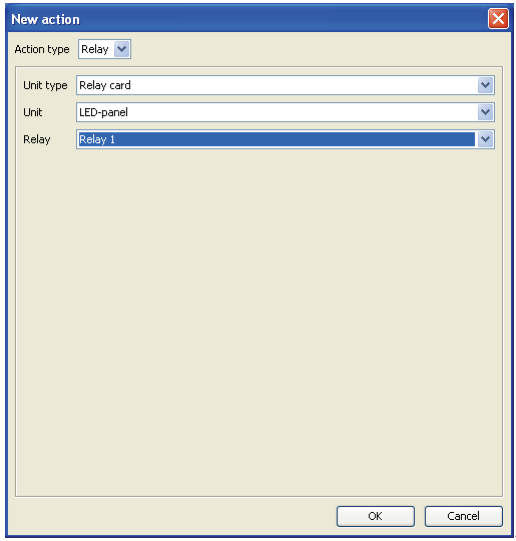
9. In the summary, note that the trigger applies for all doors highlighted earlier.



10. After this each door is connected to the relay outputs on the relay card by choosing *Modify*. An action must be added to each door in the following way: Click *Add* in the *Actions* section in the modify window:



11. Relay is chosen as *Action type. Unit type* is set to *Relay card, Unit* is set to the relay card added earlier, *LED-Panel,* Each door is connected to a one of the relay cards relays.



The two last steps are repeated for the rest of the doors included in the trigger.

If a door is open too long, the corresponding relay on the LED-Panel relay card will be activated, and a LED lights up on the panel. The person activating the alarm can now easily close that door and continue with activating the alarm.

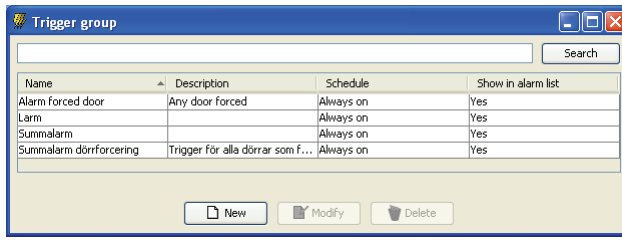
Trigger group

About Trigger group

With the *Trigger group function* you can add several individual triggers in a group, in order to create a common action when one of the included triggers is activated.

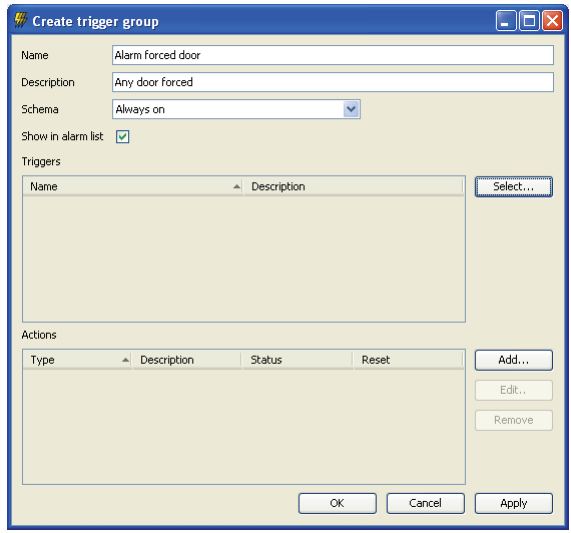
Add trigger group

1. Select *Trigger group* in the tools menu.

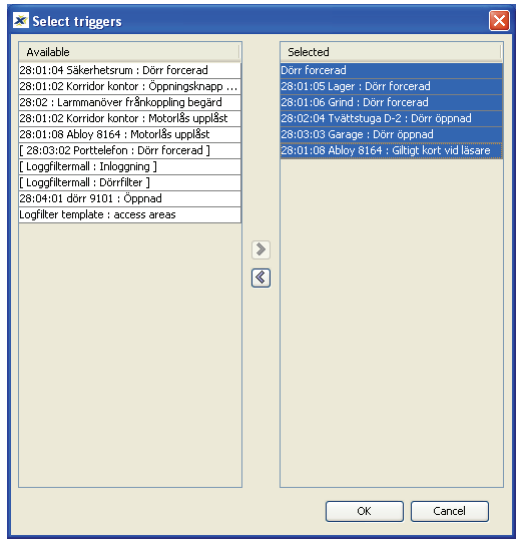


2. In the main window for trigger groups, select *New*.

3. Enter *Name, Description* and *Schema* for the trigger group. (With schema you can decide when the trigger group is active) Check *Show in alarm list*if you want that the trigger is visible in the trigger alarm list.

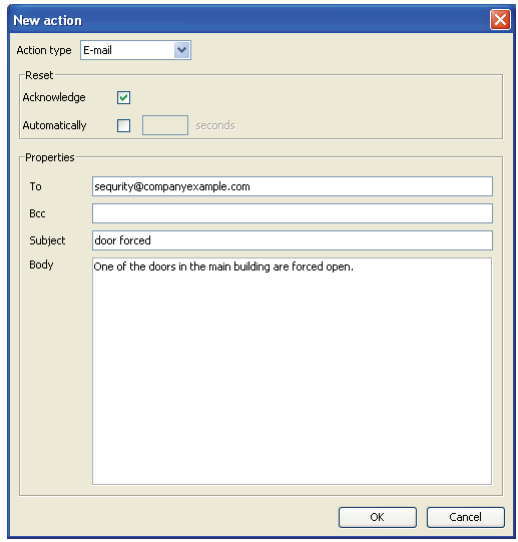


4. Click *Select* and highlight the triggers you want to include in the trigger group. Finish by clicking *Ok*.


Select triggers
Available
28:01:04 Säkerhetsrum : Dörr forcerad
28:01:02 Korridor kontor : Öppningsknapp ...
28:02 : Larmmanöver frånkoppling begärd
28:01:02 Korridor kontor : Motorlås upplåst
28:01:08 Abloy 8164 : Motorlås upplåst
[28:03:02 Porttelefon : Dörr forcerad]
[Loggfiltermall : Inloggning]
[Loggfiltermall : Dörrfilter]
28:04:01 dörr 9101 : Öppnad
Logfilter template : access areas
Selected
Dörr forcerad
28:01:05 Lager : Dörr forcerad
28:01:06 Grind : Dörr forcerad
28:02:04 Tvättstuga D-2 : Dörr öppnad
28:03:03 Garage : Dörr öppnad
28:01:08 Abloy 8164 : Giltigt kort vid läsare
OK
Cancel

5. If you want that an action is performed after activation of the trigger, click *Add* in the Actions section.

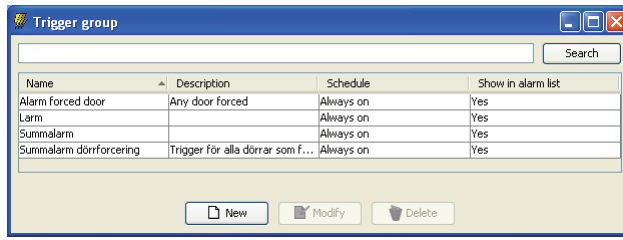
6. Choose any of the action types *Relay, E-mail* or *server application*. The example below shows the E-mail that will be sent if the trigger is activated.



Reset types:

- **Acknowledge:** The trigger is visible in the alarm list and you must acknowledge it for it to disappear from the list and reset the action.
- **Automatically:** Reset of the trigger action is made automatically after the number of seconds you add.

7. Click *Ok* to save the trigger group.



The main window for trigger groups

Trigger alarm list

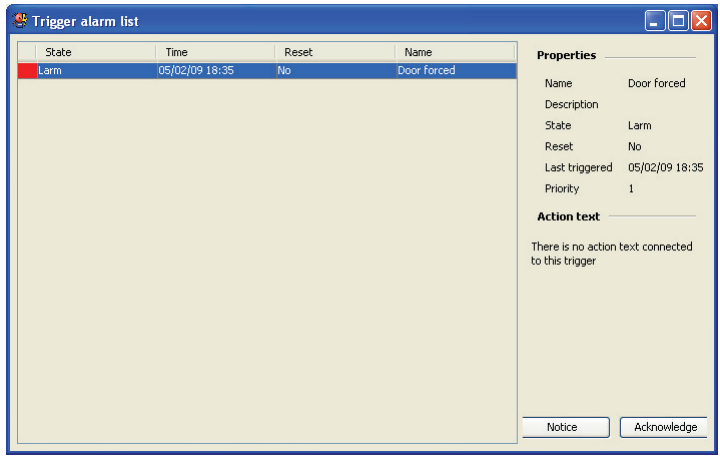
About Trigger alarm list

With the *Trigger alarm list* you can monitor all triggers set to be visible in the alarm list.

This function enables you to create a alarm functionality in ARX for all types of events in the access system..

Show Trigger alarm list

1. Select *Trigger alarm list* in the *Tools*-menu.



Main window for Trigger alarm list

Here you can notice and acknowledge trigger alarms.

- **Notice (yellow icon):** Means that you have seen the alarm, but want to keep it in the list for later. The alarm turns Yellow.
- **Acknowledge (green icon)**: The alarm is acknowledged and stays in the list until the action of the trigger is reset. (In the settings for trigger group you can set that reset of an action can be made through acknowledging it in the alarm list and/or automatically after desired time). The alarm turns green.

Camera

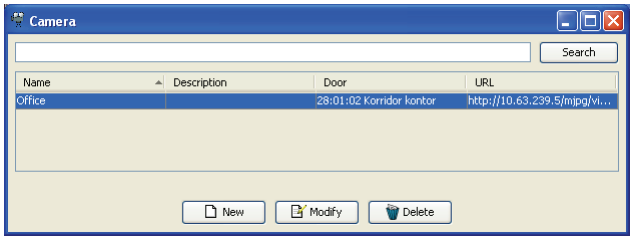
About Camera

With this function you can connect surveillance cameras to you access control system.

ARX works together with most network cameras on the market. In the examples below, a Axis 207 is shown.

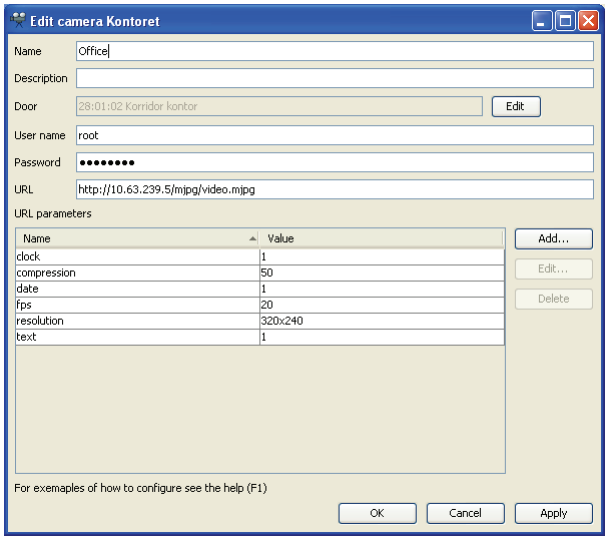
Add camera

1. Choose *Camera* in the *Tools*-menu.



Main window for the Camera function.

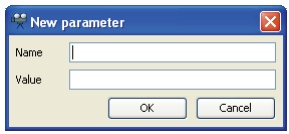
2. Select *New* to add a network camera to ARX.
3. Enter *Name, user name, password and the URL* to the camera.



In the URL parameters section you can set the camera operation. The following list shows the most common setting for an Axis 207 network camera:

- **clock:** Hide/show time stamp. Value 0/1.
- **compression**: Set the compression for the video. Value 0-100.
- **date**: Hide/show date. Value 0/1.
- **fps**: Set the number of frames per second for the camera. Value 0 and up. (20 needs a fast computer.)
- **resolution**: Set the resolution for example, 160x120, 240x280, 480x360, 640x480, or the resolution the camera can deliver.
- **text**: Hide/show text in the video. Value 0/1.

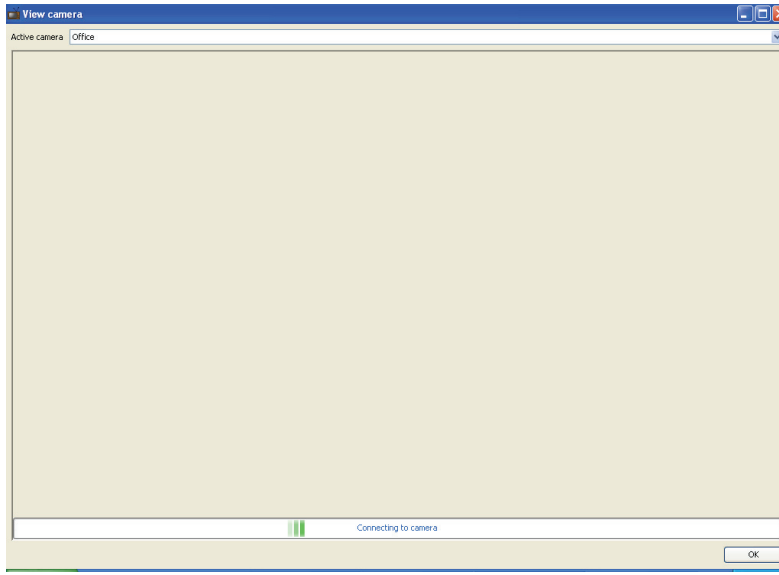
To add a new parameter, click the *Add*...button and enter the parameter name and value:



The camera settings shown above requires a fast computer, connected to the same LAN-network as the camera. Try your settings by showing the camera.

Show the camera

Select *Camera viewer* in the *Tools*-menu:



Main window for the camera viewer showing connection attempt.

If the computer or the network is slow and have problems to show the video correctly, try to lower the frames per second, the compression or the resolution of the camera.

Installation

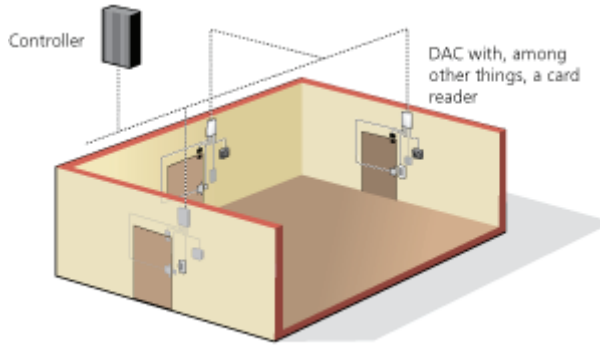
About Installation

With the *Installation* function you link together the different physical equipment in your installation. Examples of physical equipment are: controllers, DACs and readers.

In the program, the different equipment is shown in an installation tree that simplifies the overview of the connections between equipment, and the architecture of the installation.

The different building blocks in the installation tree are:

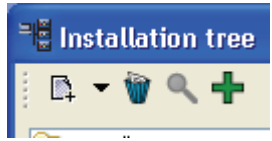
- Folders
- Controllers
- DACs (DAC, I/O DAC and Entry Phone DAC)
- Card readers (in and out readers)



Door controls with card readers are connected to the control units.

Menu options (installation)

To simplify building and customising of the installation tree, there are a number of extra menu options In the *Installation tree* window:



Menu option in the window Installation tree

These are in order of appearance and from left to right:

Add, depending on the level you are at in the tree structure, you can add *Folder, Controller, DAC* or *Readers,* with this menu option.

Remove, removes selected object.

Status, shows the current status for the selected component in a separate window.

Expand, shows the entire tree structure for the selected object.

The menu options *Add*, *Remove* and *Status* can also be made available by right-clicking with the mouse on the desired object in the installation tree.

NOTE! By right-clicking a controller or DAC in the installation tree, you will also get the extra menu option *Functions*:

- **Functions**, for a controller you can choose the option *Load, Reboot* or *Terminal* and for a DAC you can choose *Pulse open* or *Go to door*.

Recommendation: When to reboot a controller, use the menu option *Reboot* in the *Installation tree* window.
(Rebooting via command in a terminal window will cause the terminal window not to close properly.)

Symbols in the installation tree

In the left side of the window *Installation tree* a tree structure is shown that provides an overview of the connections between equipment, and the architecture of the installation.

In the installation tree there are, besides folder symbols, a number of different ARX-symbols which show the type of object, but also in certain cases the status of the object.

Controller

Non-activated controller. [Grey]

Activated controller that is uploading information. [Cyan]

Functioning controller. [Green]

Controller active but no contact with the server. [Yellow]

An error has occurred in the controller! [Red]

DAC

Symbol for DAC

Symbol for Hi-O DAC

Readers

Symbol for in- or out readers.

Relay

Symbol for a relay.

Input

Symbol for input.

Airlock (option)

Symbol for airlock.

Entry Phone (option)

Symbol for entry phone DAC

Booking Panel (option)

Symbol for booking panel

Elevator (option)

Symbol for elevator

Relay card RCE-16 (option)

Symbol for an RCE-16 relay card

Time anti pass-back (option)

Symbol for time anti pass-back

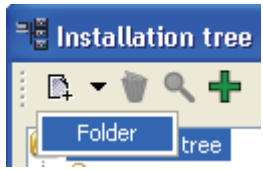
Folders

The top level in the installation tree is always the folder *Installation tree*. Under it, you subsequently create your own sub-folders. This ensures that the installation is organized and grouped in the best possible way.

Add folder

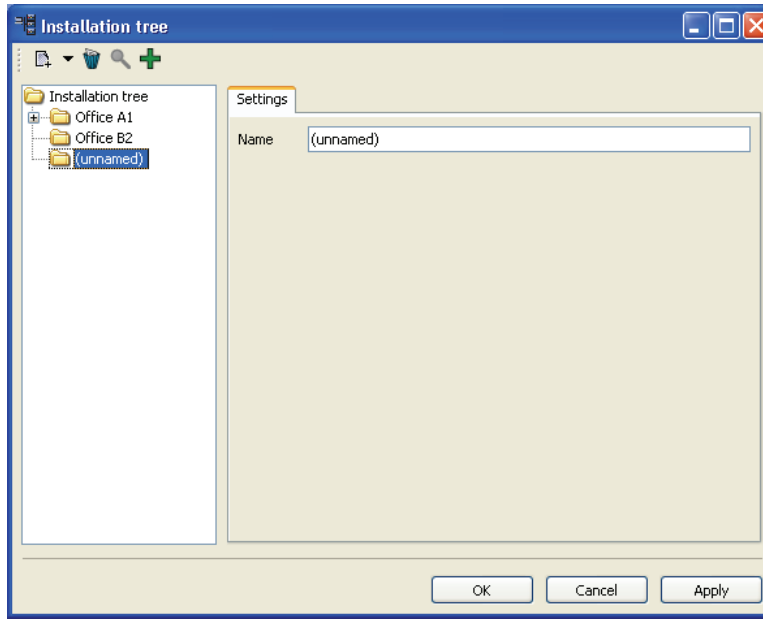
To add a folder to the installation tree, do the following:

1. Highlight the level in the installation tree where the folder shall be located under. (Initially, there is only the folder *Installation tree*.)
2. Then select the option *Add* in the windows menu bar, and click *Folder*.



Menu for adding a folder

3. The symbol for the new folder is now added to the installation tree on the left hand side of the window.
4. In the right side of the window, enter a name for the new folder in the field *Name*.



Window Installation tree with new folder

5. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and not save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Status

By clicking on the right hand button of the mouse and selecting status, you can get information on incorrectly installed units, see chapter "Status" on page 213.

Remove folder

To remove a folder from the installation tree, do the following:

1. Highlight the folder that is to be removed.

2. Then select the menu option *Remove* in the window menu bar.

NOTE! You can not remove a folder that contains controllers and DACs that are stored in the area tree structure of the window *Access areas* or are connected to alarm zones.

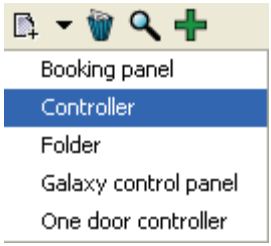
If you try to do this, a menu dialog with the notification text: *The object cannot be deleted since it is already in use by….*

Controller

Add controller

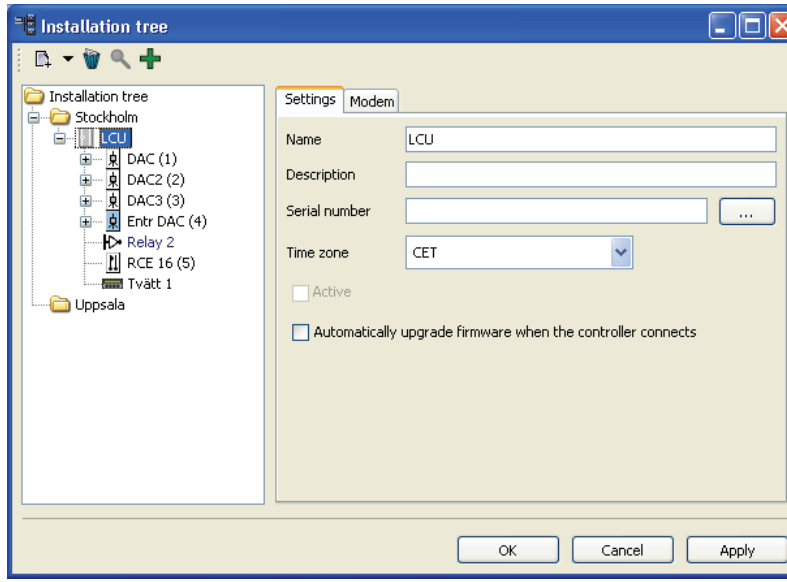
To add a controller to the installation tree, do the following:

1. Highlight the folder in the installation tree that the controller shall be located under.
2. Then select the option *Add* in the window menu bar, and click *Controller*.



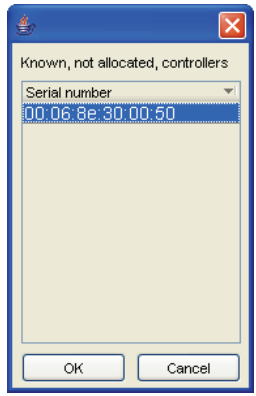
Menu for adding a controller

3. The symbol for the new controller is now added to the installation tree on the left side of the window.
4. On the right side of the window, enter a *Name* for the controller and write a brief *Description*.



Window Installation tree with settings for controller

5. Afterwards, enter a *Serial number* and select which *Time zone* that is applicable. The serial number can either be entered directly or it can be selected from a list of available controllers. To select from this list, click the button to the right of the field *Serial number*.



Window Select serial number from list

6. Finally, define if the controller is to be set as *Active* and if the controller firmware should be updated automatically when the controller connects.
7. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and not save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

NOTE! The controller serial number is written in the format **00:06:8e:3x:xx:xx** (where the last five character positions are different for each controller). The controller serial number is normally found on the label that is attached to the front of the CPU-card inside the controller.

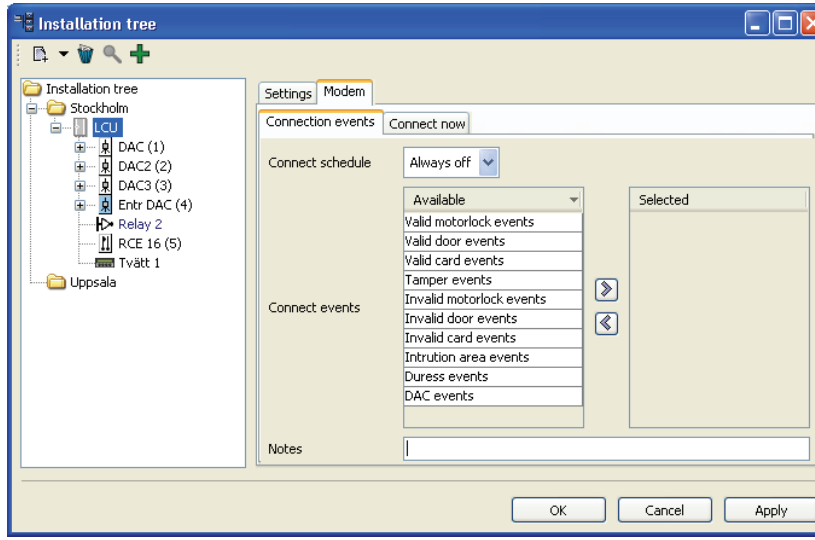
Note that you can still add information to the controller, or reactivate it, later in the installation process.

Modem tab (optional feature)

If the controller is installed on a location with no physical contact with the local network, it can be provided with a modem, which communicates with the ARX server through the telephone line.

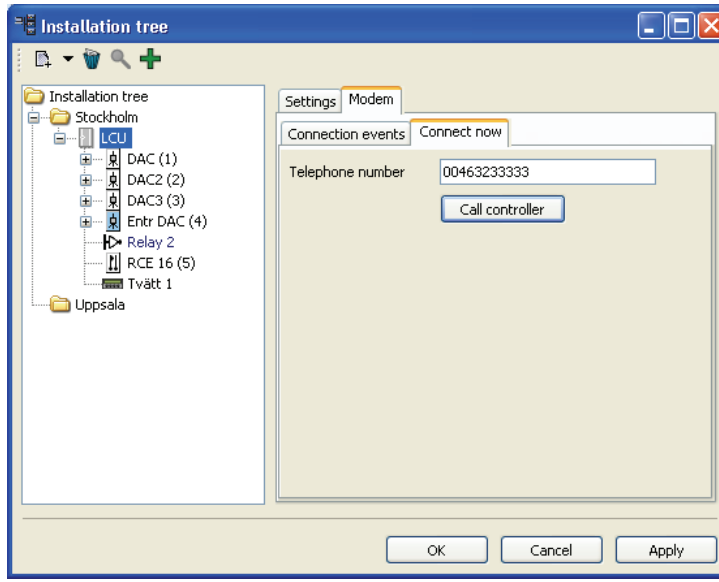
On the *Connection Events* tab you define the controller behaviour:

- *Connect schedule*
  Setting for when the controller uses the modem for communication.
- *Connects events*
  The selected events trigger the controller to use the modem to contact the ARX server.
- *Notes*
  Field for additional information.



Window Installation tree with settings for Modem Connection events

On the *Connect now* tab the telephone number is set.



Window Installation tree with settings for Modem Connection settings

Modify controller settings

To change or check the settings for a controller, do the following:

1. Highlight the symbol for the desired controller in the installation tree.
2. To the right of the window, you can now change *Name*, *Description* or *Serial number,* you can select the *Time zone* that is to apply to the controller. You can even select if the controller is to be set to *Active,* or not and if the controllers firmware should be updated.
3. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and do not want to save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Remove controller

To remove a controller, do the following:

1. Highlight the symbol for the controller in the installation tree.
2. Select the menu option *Remove* in the windows menu bar.
3. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and do not want to save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Note! You can not remove a controller containing DAC:s that are added in the tree structure in Access areas or includes connections to alarm zones. If you try, ARX displays the dependencies that needs to be broken.

Extra Functions (controller)

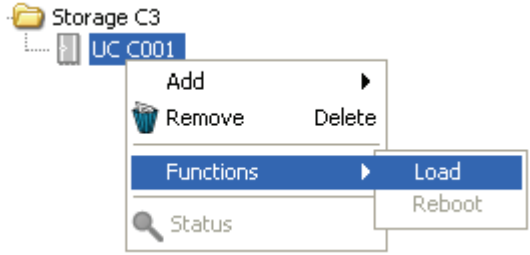
For a controller in the installation tree, there a few extra functions called *Load* and *Reboot* available to make work easier in the installation view.

With the *Load* function you can choose to upload all available data to a specific controller. (You will normally never need to do this.) With the function *Reboot* you can re-start the controller.

To choose one of these functions, do the following:

1. Select the menu option *Functions* with a right-click on the desired controller in the installation tree.

2. Then select *Load* or Reboot by moving your cursor to the right.



Menu for the Load function for controllers

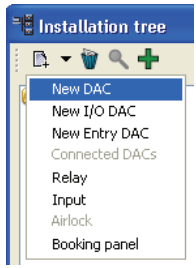
DAC

There are two ways to add a DAC in the installation tree: you can either enter a *New DAC*, or you can select from a list of *Connected DACs*. Both methods are described below.

Add a new DAC

To add a new DAC to the installation tree, do the following:

1. Highlight the controller in the installation tree that the new DAC shall be connected to.
2. Then select the option *Add* in the windows menu bar, and click *New DAC*.

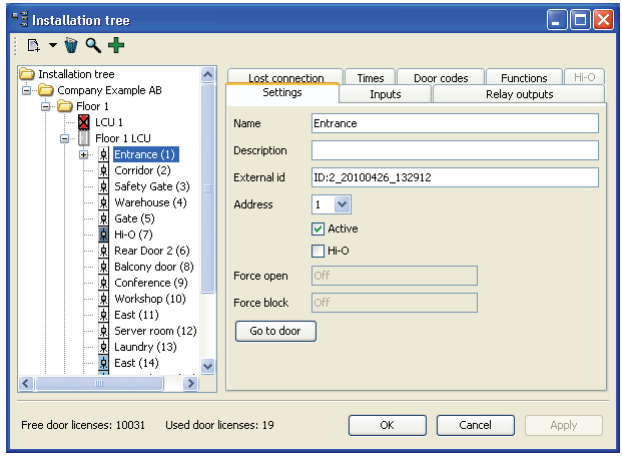


Menu for adding a New DAC

3. The symbol for the new DAC is now added to the installation tree on the left side of the window.

4. On the right side of the window (under the tab *Settings*), enter DAC *Name*, *External ID* and *Address, s*elect a *DAC-mode,* and define if it shall be *Active,* or not and if it is a Hi-O product. (If no External ID is entered by the operator, the system will assign the DAC a unique ID.)

5. The fields *Force open* and *Force block* only show status and cannot be altered here. Can only be altered with the software integrated with ARX. (For more information, see "HTTP Access in ARX" on page 436 .)



Window Installation tree with settings for a new DAC

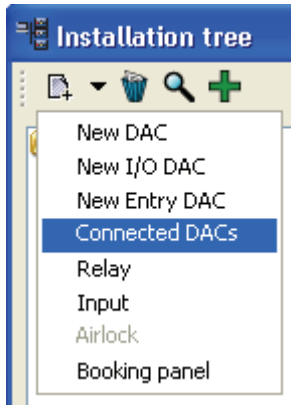
6. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and do not want to save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Note that you can still can add information for the controller, or reactivate it, later in the installation process.

Add connected DAC

To add DACs that are already connected to a controller, do the following:

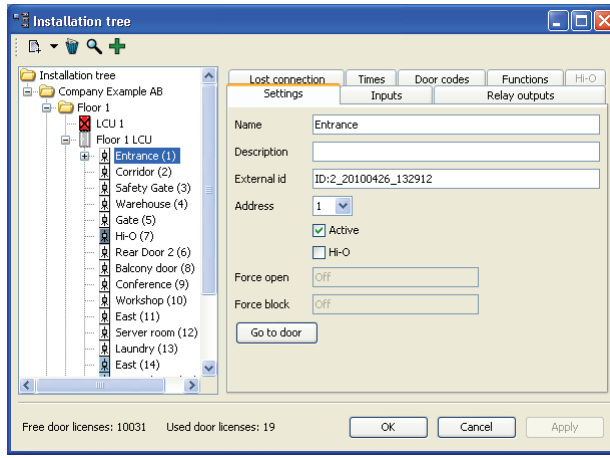
1. Highlight the controller in the installation tree that the DAC is connected to.
2. Then select the option *Add* in the window menu bar, and click *Connected DACs*.



Popup menu for adding Connected DACs

3. Symbols for the connected DACs will now appear in the installation tree. The text close to the DAC-symbols is blue, which shows that the new installation is not yet saved. (When the changes are saved, the blue text changes to black text.)

4. The connected DACs are automatically allocated a default name and default settings.



Window Installation tree with settings for a connected DAC

5. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and do not want to save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

DAC options

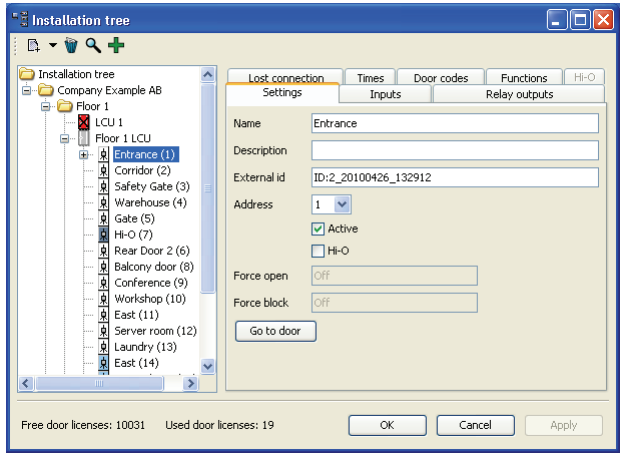
When you have highlighted a DAC on the left side of the window *Installation tree,* a number of tabs are displayed in the right side of the window that control the *Settings*, *Lost connection*, *Times*, *Door codes*, *Relay outputs* and *Functions* for the DAC. Different options for each tab are described below.

Settings tab

In the tab *Settings* you enter the DAC general settings, such as *Name*, *Address*, *External ID* and *DAC-mode,* and whether the DAC shall be Active or not and if it is a Hi-O product. Additionally,

information regarding however *Forced open* and *Forced block* is on or off is shown.

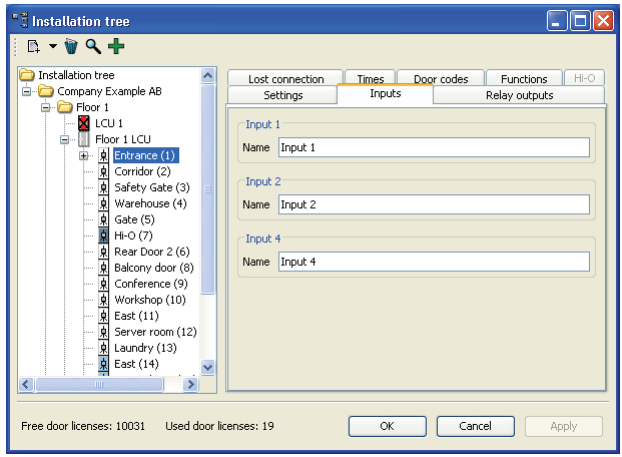
The DAC *Address* consists of a number (from 1 to 16) that indicates which address the DAC has in the controller.



Installation tree with the DAC tab Settings

Inputs tab

In the tab *Inputs* you can name the three inputs. For example in order to easily see what the input is used for, when used in a trigger or in the Log.

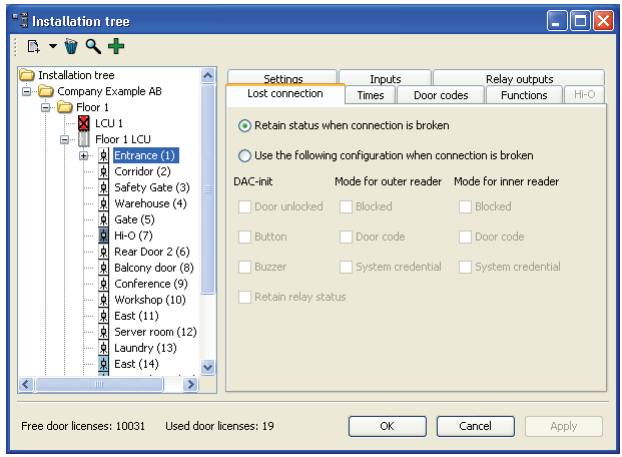


Installation tree with a DAC, input tab.

Lost connection tab

Under this tab, you can select what will happen when the connection between the controller and the DAC is broken. The two main options are:

- *Retain status when connection is broken*
- *Use the following configuration when connection is broken*. If you select this option and you can enter which configuration parameters that will apply during a breakdown. The parameters are divided into three groups: *DAC-init*, *Mode for outer reader* and *Mode for inner reader*.

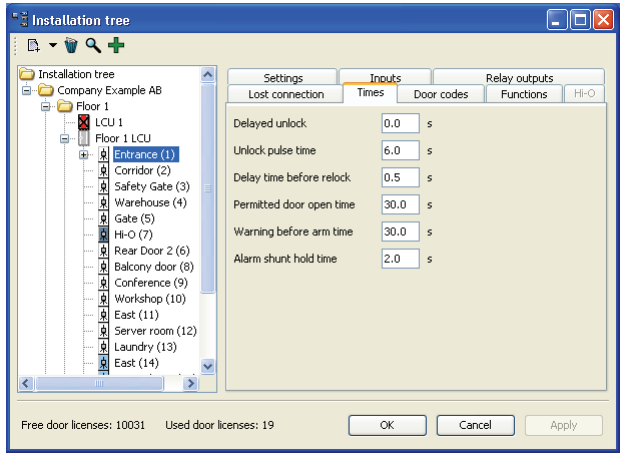


Installation tree with the DAC tab Lost connection

Times tab

Under this tab, you can enter a number of different timer settings for the DAC:

- *Delayed unlock*
- *Unlock pulse time*
- *Delay time before relock (The time delay until an opened door locks.)*
- *Permitted door open time*
- *Warning before arm time*
- *Alarm shunt hold time* (time before the outer lock is engaged after the door has been closed)



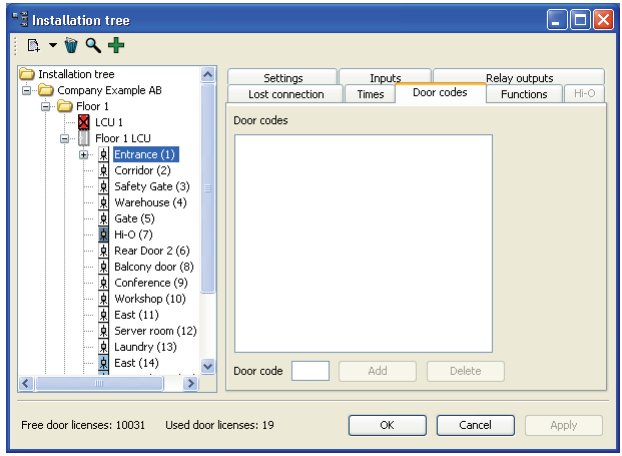
Installation tree with the DAC tab Times

Door codes tab

Here you define the four digit door codes that will open the selected door. You can enter up to ten door codes.

A new door code is entered into the field and is saved with the button *Add*.

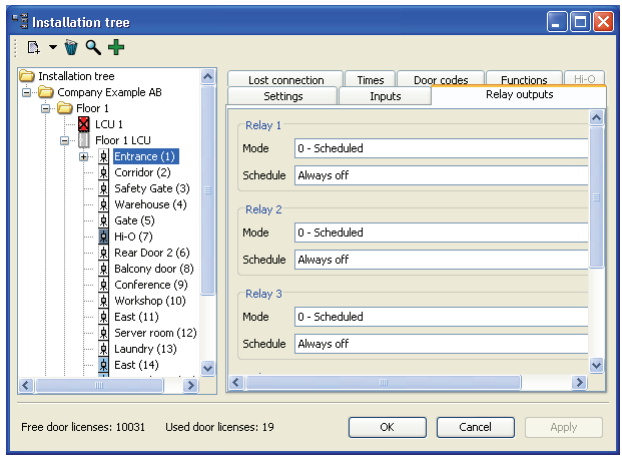
NOTE! For a door code to work, the door mode for the door is required to be correctly set.



Installation tree with the DAC tab, Door codes

Relay outputs tab

From the tab *Relay outputs,* for any type of DAC, you can select which function each and every one of the five relay outputs (1, 2, 3, 4 and 8) shall have, and which schedule shall apply. (Relay 8 is named 6 for DAC-420 and DAC-430).



Installation tree with the DAC tab Relay outputs

To select a relay function, click on the field that belongs to the desired relay and select one of the functions from the menu that is shown. The options are:

0 - Scheduled
The relay is controlled by the schedule that is selected from the list in the *Schedule* field. (For further information see section "Schedules").

1 – Follow output 8 (6)
The selected relay mirrors output 8. It is used when you want to have a parallel signalling for output 8. (Only applicable for DAC-30)

2 - Buzzer
The relay is activated at the same time that the buzzer starts in the

reader. The output is not activated if the buzzer is switched off or deactivated by a schedule.

3 - Temporary alarm shunt
The relay acts like a temporary alarm bypass. It is used when the DAC's alarm interface needs a temporary alarm bypass output (ABP).

4 – Door automatic
The relay pulses, when the motor lock and electric contactor are in an unlocked mode. When the door unlocks through a schedule, the output does not pulse.

5 – Door position
The relay closes when the door is closed and opens when the door is opened.

6 – Motor lock security locked
The relay closes when the motor lock is locked at night and the door is closed.

7 – Motor lock unlocked
The relay follows the motor lock mode (bolt/lever inside).

8 – Motor lock day locked
The relay follows the motor lock mode (bolt/lever outside).

9 – Electric strike
The relay follows the electric strike mode.

10 - Temporary alarm shunt (do not drop when door not closed)
This relay function is used when you want to be able to differentiate between alarm during access (the door has been open for too long) and when the door is breached. After passing through, the relay is activated until the door is closed.

11 - Tamper OK, DAC
The relay follows the DAC's sabotage switch. The relay trips when the DAC lock is engaged.

12 - Permanent alarm shunt
The relay follows the alarm bypass relay (ABP) in the DAC when the DAC is the alarm interface. Otherwise, no function.

13 – Warning before alarm arm
When the alarm is activated the relay closes and gives a warning before the alarm bypass relay in the main DAC interface engages.

The time for the warning is decided by the parameter "Warning time before engagement". Kan only be used on the main DAC. Note! This is not applicable in a Galaxy alarm zone.

14 – Follow input 7 (Input 3 in DAC-420/430)
The relay follows the DAC's blocking inputs.

15 – Supervised door monitor tamper
Is used mainly when the DAC is acting as a detector. The relay can also be used when you want to have a summarized sabotage alarm from the balanced door contactors and DACs.

16 – Supervised door monitor alarm
Is used mainly when the DAC is acting as a detector. The relay closes when the door is closed and is tripped when the door is breached. When the door is opened after a valid card swipe or using the door opener, the relay does not trip.

17 – Handicap function
The relay trips when a person with disabled clearance swipes his card in the reader. Can be used, for example, to activate automatic door.

18 – Forced buzzer
The relay is activated at the same time that the buzzer starts in the reader. The output is activated even when the buzzer is switched off or inactivated via a schedule.

19 – Motor lock day mode
The relay follows the day mode input (Input 1) in the DAC.

20 – Automatic door remote controlled
The relay trips when the motor lock and electric end lever are unlocked. The relay is tripped for as long as the door is opened. The relay also trips when the door is opened via a schedule.

21 – Valid exit
The relay closes when someone enters via the outer reader. The relay trips at the same time as the alarm bypass relay (ABP) closes

and trips when the door is opened or the time for the unlocked door is exceeded.

22 – Valid entry
The relay closes when someone exits using the internal reader. The relay closes at the same time that the alarm bypass relay (ABP) closes and trips when the door is opened or the time for the unlocked door is exceeded.

23 – Invalid card
The relay closes at the same time that an invalid card is swiped in the reader. The relay is reset by swiping a valid card in the reader.

24 – Motor lock error
The relay closes if the motor lock does not locks.

25 – Drops when door forced
The relay is normally closed and drops when “a door is forced". The relay does not drop on "Door open too long".

26 – “Disabled function”-relay with timed inactivation
The relay closes when using a handicap card (even if the door is unlocked) and closes after “unlock pulse time” (on the *Times* tab)

27 – Mirror day/night function without motor lock
Functions even if the DAC does not have a motor lock. The relay follows the settings for the motor lock of the DAC, for example by unlocking at first granted access.

28 – Door forced open, reset with valid card
The relay closes and stays closed when door is forced. Can be reset with valid card.

29-35 – Extra functions

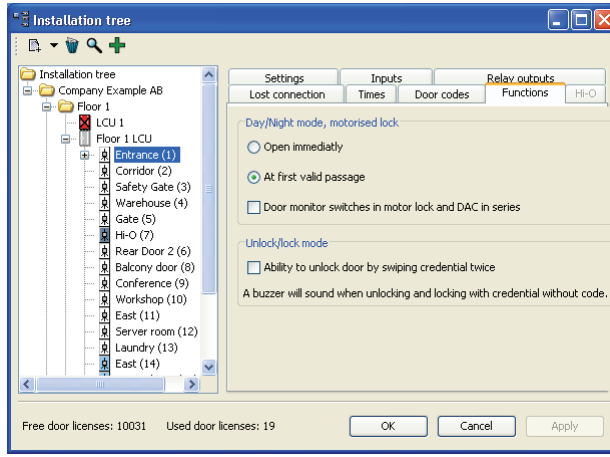
When you have chosen a relay function, click *Apply* to save the new settings.

Functions tab

Under this tab, you can enter a number of parameters for doors.

- For a motorised lock (*Day/Night mode*), you can choose to *Open immediately* or *At first valid passag*e.

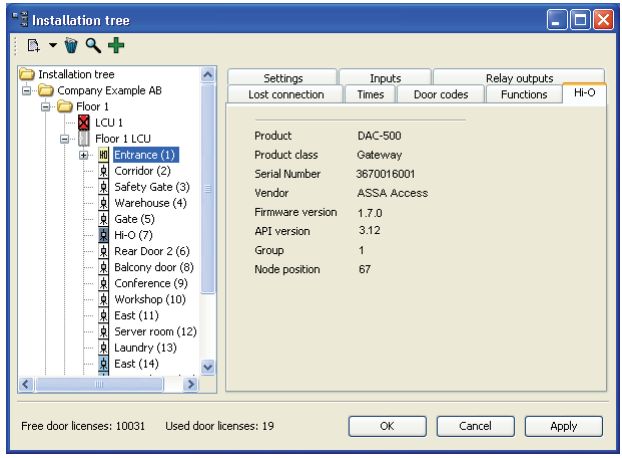
- With the checkbox *Door monitor switches in motor lock and DAC in series* you instruct the system to treat the door position input of the DAC and the door sensor of the motor locks they were connected in series.
- It is possible to select the unlock/lock mode *Ability to unlock door by swiping card twice*. It is required, however, also that the users who can do this have been assigned an access category with permission to lock/unlock doors and that the door type has the property Unlock from reader set. The lock/unlock operation is done by reading a valid card two times in the swipe card reader. (The buzzer then sounds as confirmation)



Installation tree with the Functions tab for DAC.

Hi-O tab

If the the DAC is of Hi-O type, information of the hardware is shown here.



Installation tree with the Functions tab for DAC.

One door controller

A One door controller is a controller and DAC in one. It can be added directly to a folder, thus it needs no controller. Therefore it is also have the functionality of both a controller and a DAC.

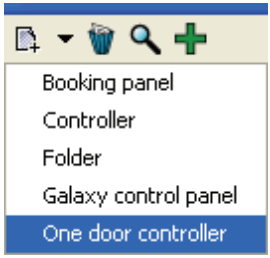
To add a One door controller to the door list (installation tree), do the following.

Add a One door controller

To add a controller to the installation tree, do the following:

1. Highlight the folder in the installation tree that the controller shall be located under.

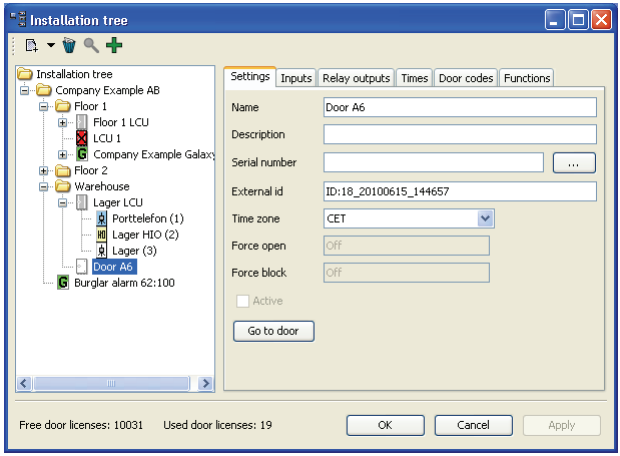
2. Then select the option *Add* in the window menu bar, and click *Controller*.



Menu for adding a controller

3. The symbol for the new controller is now added to the installation tree on the left side of the window.

4. On the right side of the window, enter a *Name* for the controller and write a brief *Description*.



Window Installation tree with settings for controller

5. Afterwards, enter a *Serial number* and select which *Time zone* that is applicable. The serial number can either be entered directly or it can be selected from a list of available

controllers. To select from this list, click the button to the right of the field *Serial number*.

NOTE! The controller serial number is written in the format **00:06:8e:3x:xx:xx** (where the last five character positions are different for each controller).

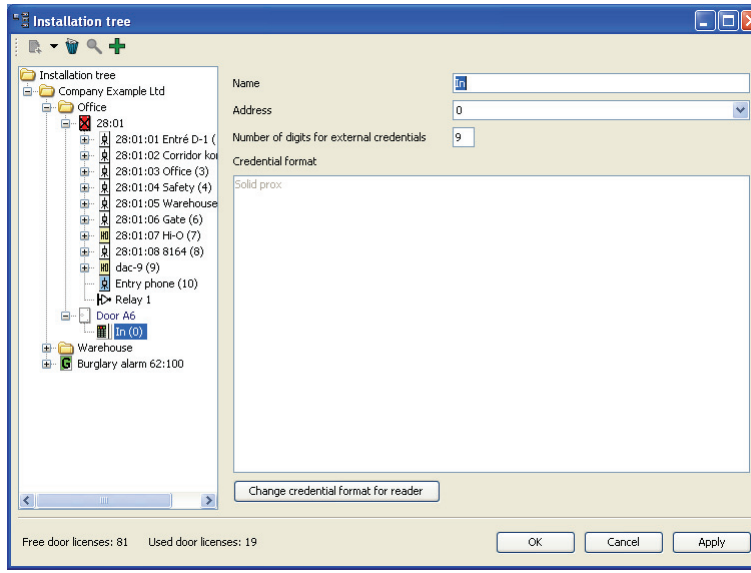
Note that you can still add information to the controller, or reactivate it, later in the installation process.

The Force open and Force block only shows the status and can not be changed here. They can only be altered by software integrated with ARX. (For more information, see section "HTTP Access in ARX" on page 436).

6. Define if the controller is to be set as *Active* and if the controller firmware should be updated automatically when the controller connects.
7. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window and not save the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

In order for the one door controller to work with a reader, at least one reader must be added:

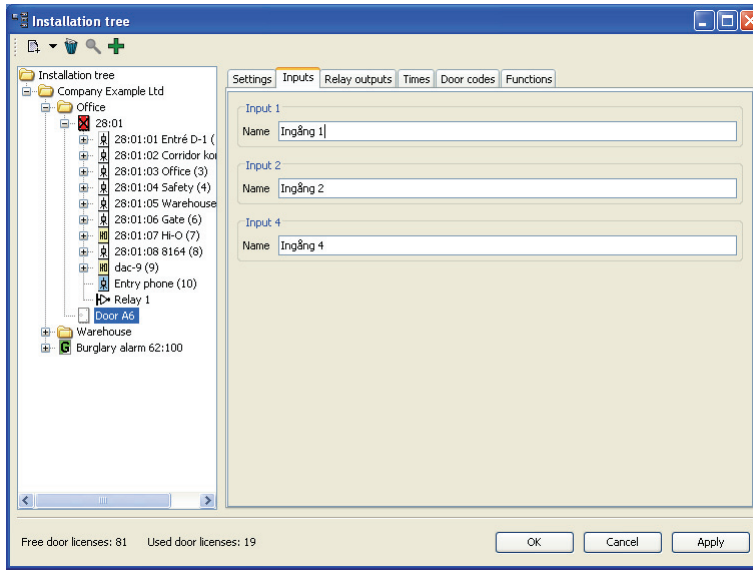
8. Right click on the one door controller icon and select *Add reader*. See section Readers on page 273.



One door controller with a reader connected.

Inputs tab

In the tab *Inputs* you can name the three inputs. For example in order to easily see what the input is used for, when used in a trigger or in the Log.



Installation tree with a one door controller, input tab.

Relay outputs tab

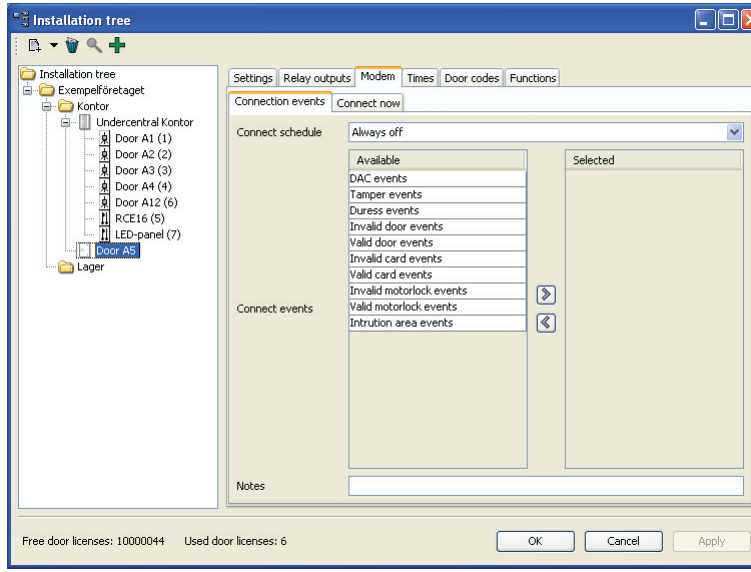
See the explanation for the Relay outputs tab for a DAC, section "*Relay outputs tab" on page 229*.

Modem tab (optional feature)

If the controller is installed on a location with no physical contact with the local network, it can be provided with a modem, which communicates with the ARX server through the telephone line.

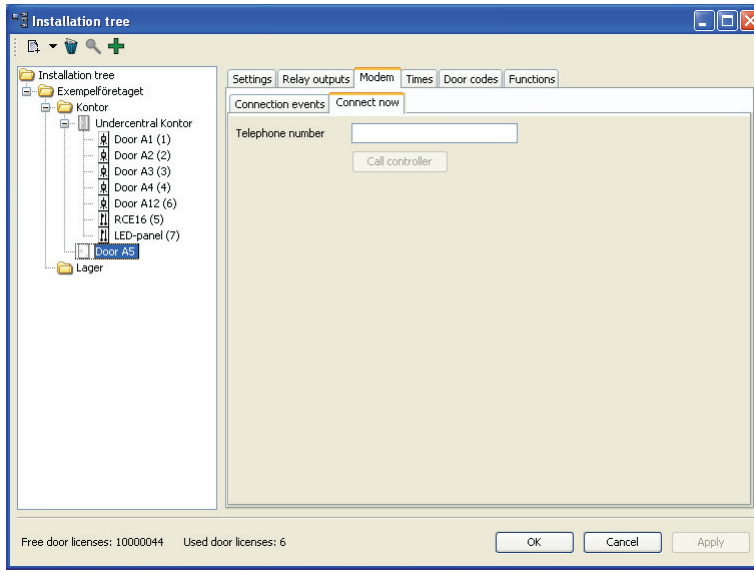
On the *Connection Events* tab you define the controller behaviour:

- *Connect schedule*
  Setting for when the controller uses the modem for communication.
- *Connects events*
  The selected events trigger the controller to use the modem to contact the ARX server.
- *Notes*
  Field for additional information.



Window Installation tree with settings for Modem Connection events

On the *Connect now* tab the telephone number is set. Click the *Call controller* to initiate the call to the controller.

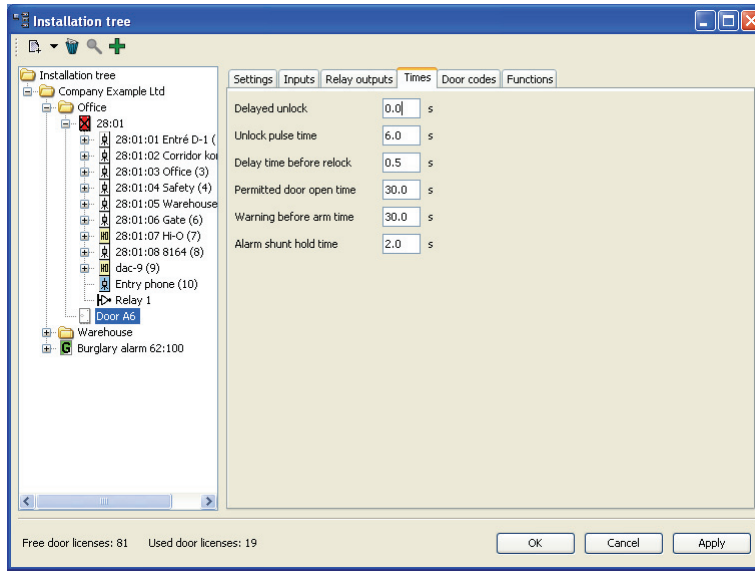


Window Installation tree with settings for Modem Connection settings

Times tab

Under this tab, you can enter a number of different timer settings for the controller:

- *Delayed unlock*
- *Unlock pulse time*
- *Delay time before relock*
- *Permitted door open time*
- *Warning before arm time*
- *Alarm shunt hold time* (time before the outer lock is engaged after the door has been closed)



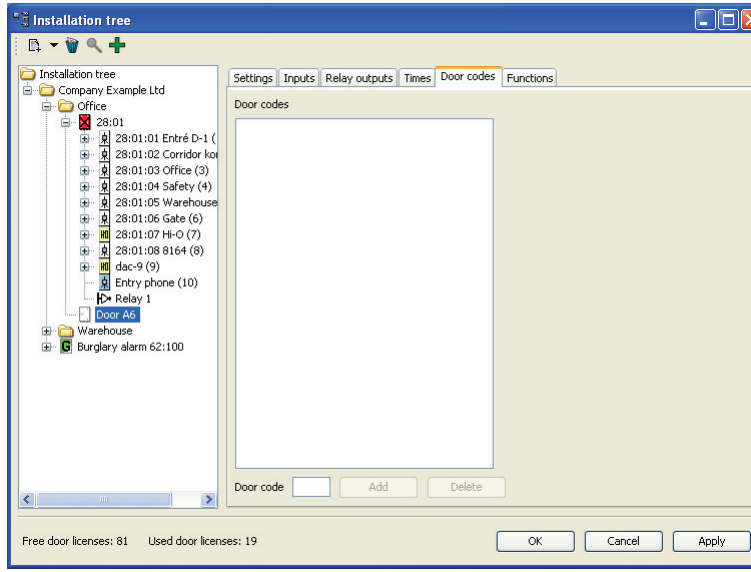
Installation tree with the tab Times

Door codes tab

Here you define the four digit door codes that will open the selected door. You can enter up to ten door codes.

A new door code is entered into the field and is saved with the button *Add*.

NOTE! For a door code to work, the door mode for the door is required to be correctly set.



Installation tree with the DAC tab, Door codes

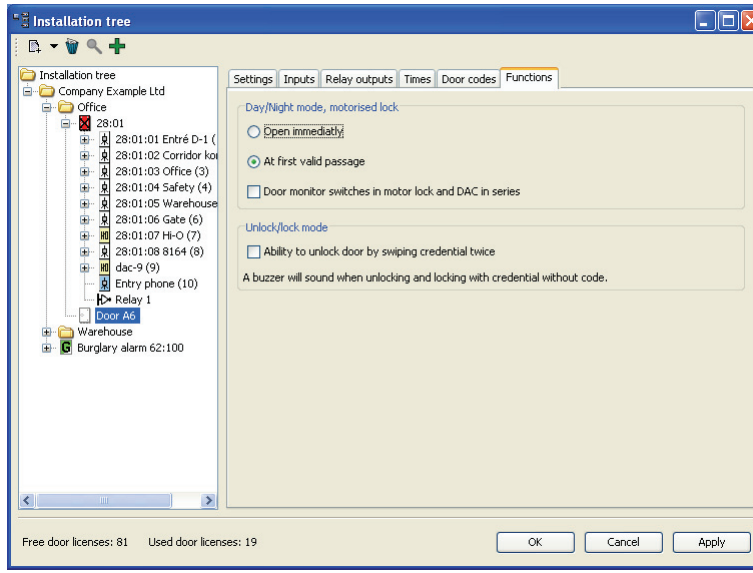
Functions tab

Under this tab, you can enter a number of parameters for doors.

- For a motorised lock (*Day/Night mode*), you can choose to *Open immediately* or *At first valid passag*e.
- With the checkbox *Door monitor switches in motor lock and DAC in series* you instruct the system to treat the door

position input of the DAC and the door sensor of the motor locks they were connected in series.

- It is possible to select the unlock/lock mode *Ability to unlock door by swiping card twice*. It is required, however, also that the users who can do this have been assigned an access category with permission to lock/unlock doors and that the door type has the property Unlock from reader set. The lock/unlock operation is done by reading a valid card two times in the swipe card reader. (The buzzer then sounds as confirmation)

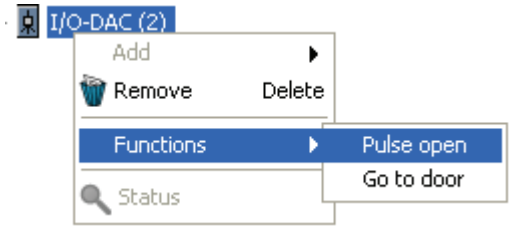


Installation tree with the tab Functions

Pulse open door

There is a function that makes it possible for you to choose to unlock a specific door from the installation tree view. To do this, do the following:

1. Select the menu option *Functions* with a right-click on the desired DAC in the installation tree. Then move the cursor with the mouse to the right and click *Pulse open*.



Menu option to pulse open a door

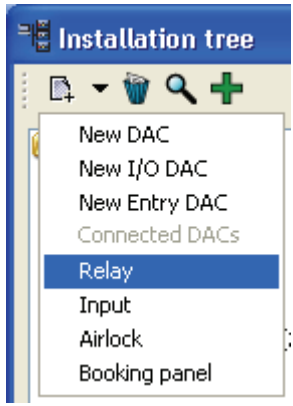
The door is unlocked for a number of seconds. (The time for pulse opening is defined for each DAC in the installation tree, see for example the section "DAC" on page 220.)

Relay

The relay card 6416-RC is a card with 4 relays and one input that is mounted in a 9016 controller, where 3 relays can be programmed and be managed by different functions.

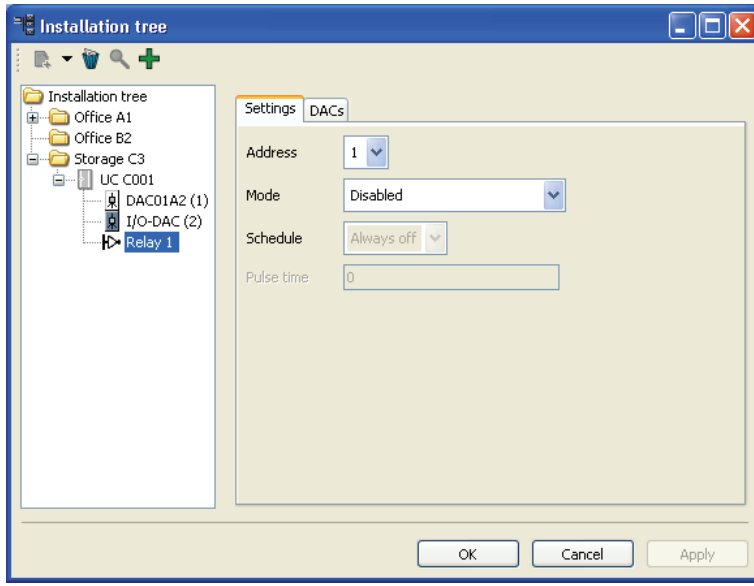
To add a relay to the installation tree, do the following:

1. Highlight the controller that the relay shall be connected to.
2. Then select the option *Add* in the windows menu bar, and click *Relay*.



Popup menu for adding Relay

3. The relay symbol is now shown to the left in the installation tree and to the right the different relay settings are shown under the tabs *Settings* and *DACs*.



The Installation tree with a relay highlighted and the Settings tab active

Under the *Settings* tab you choose *Address*, *Mode* and in some cases *Schedule* and *Pulse time* for the relay.

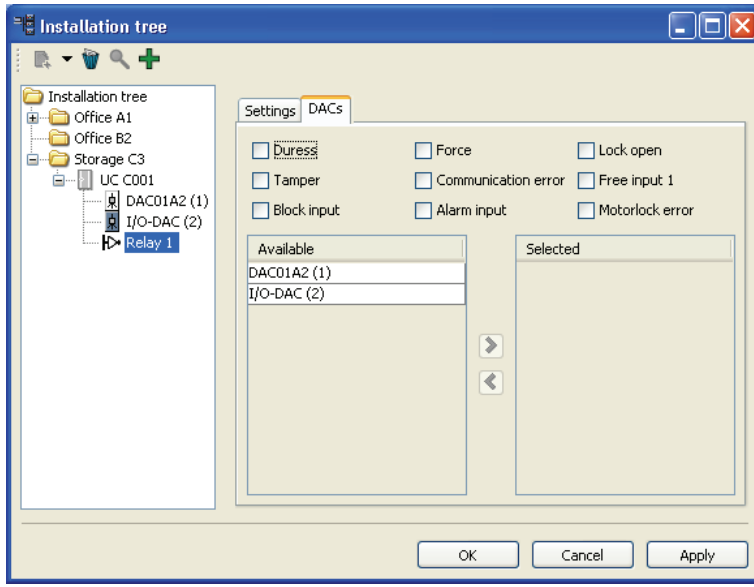
With the option *Mode* you choose how the relay should operate:

- Disabled
- Schedule
- Unlocked door
- Open door
- Open or unlocked door
- Motor lock open (Day locked)
- Motor lock error
- Select mask (DACs tab)

If the *Schedule* option is selected, you can choose between the alternatives: *Always off*, *Always on* or any of the *Other schedules* available in the system.

If you choose *Select mask (DACs tab)* you can set a number of DAC alternatives under the *DACs* tab.

The *DACs* tab is also used for selecting which DACs that should be affect chosen function of the relay.



The Installation tree with a relay highlighted and the DACs tab active

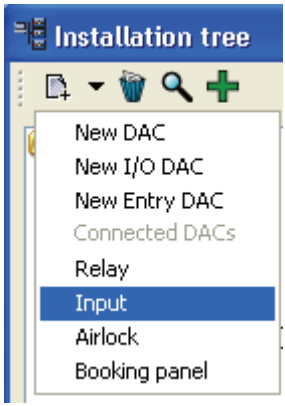
Input

The relay card 6416-RC has 4 relays and 1 input, which is mounted in a 9016 controller, where the input can be programmed to control different functions in the controller where it is mounted.

For example, it can be connected to a fire alarm so that when a fire breaks out the control units unlock these doors, this is called panic unlocking.

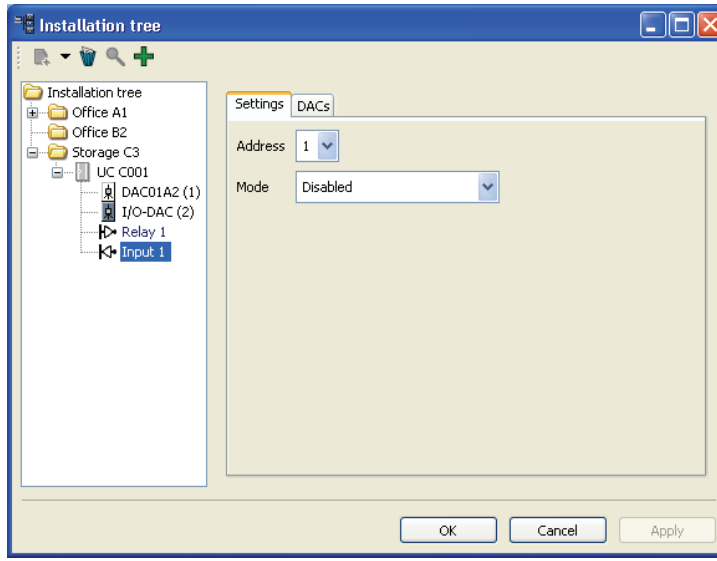
To add an input to the installation tree, do the following:

1. Highlight the controller that the input shall be connected to.
2. Then select the option *Add* in the windows menu bar, and click *Input*.



Popup menu for adding Input

3. The input symbol is now shown to the left in the installation tree and to the right the different relay settings are shown under the tabs *Settings* and *DACs*.



The Installation tree with an input highlighted and the Settings tab active

Under the *Settings tab*, you choose *Address* and *Mode* for the input.

These are the alternatives for the *Mode* option:

- *Disabled*
- *Monitored*
- *Panic unlock*
- *Panic lock*
- *Enable door code only mode*

The *DACs* tab is used to select which DACs that should be connected to the input.

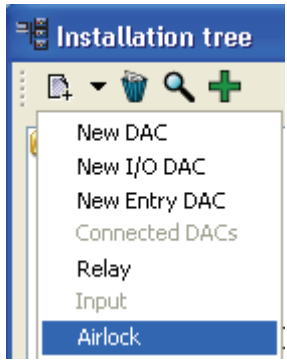
Airlock (option)

With the function *Airlock* the operator can link two or more doors together to create an airlock. In an airlock, only one of the doors can be open at the same time.

Note! Only one airlock can be added per controller.

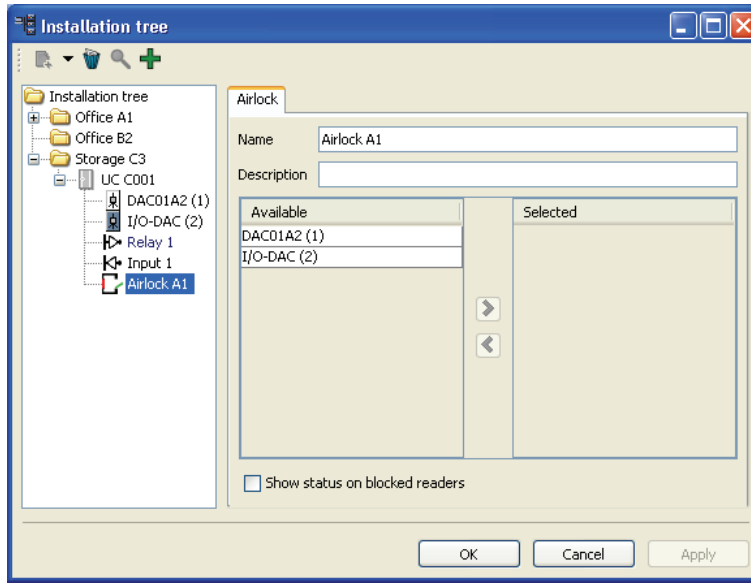
To add an airlock to the installation tree, do the following:

1. Highlight the controller that the airlock shall be connected to.
2. Then select the option *Add* in the windows menu bar, and click *Airlock*.



Popup menu for adding Airlock

3. The airlock symbol is now shown to the left in the installation tree and to the right airlock settings are shown under the tab *Airlock*.



The Installation tree with an airlock highlighted

Under the *Airlock tab* enter a *Name*, a brief *Description* and choose which doors (DACs) that should be included in the airlock by highlighting a DAC in the left column (*Available*) and with the arrow button move the selected format to the right column (*Selected*).

If you select *Show status on blocked readers* the red alarm indicator is lit up when the airlock is blocked, when a door is unlocked or opened.

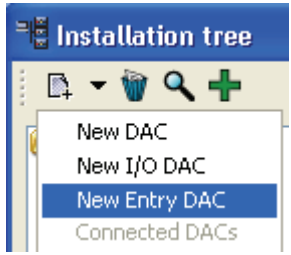
Entry phone (option)

The ARX Client software function *Entry phone* consists of a special entry phone DAC and a few extra settings associated with the entry phone function.

NOTE! The maximum number of entry phone DACs per each controller is 8. The total number of entry phones allowed in the installation tree is limited to the number of door licences you have.

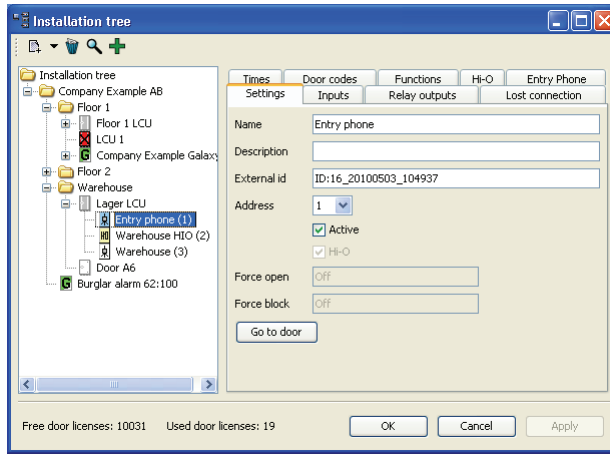
To add a entry phone to the installation tree, do the following:

1. Highlight the controller in the installation tree that the new I/O DAC shall be connected to.
2. Then select the option *Add* in the window menu bar, and click *New Entry DAC*.



Popup menu for adding entry DACs

3. The entry DAC symbol is now shown to the left in the installation tree and to the right the DAC settings are shown.
4. In order for the entry DAC to work as a reader, a reader must be added to the entry phone. Right click on the entry phone and select *Add reader*.



The Installation tree with a new entry phone highlighted

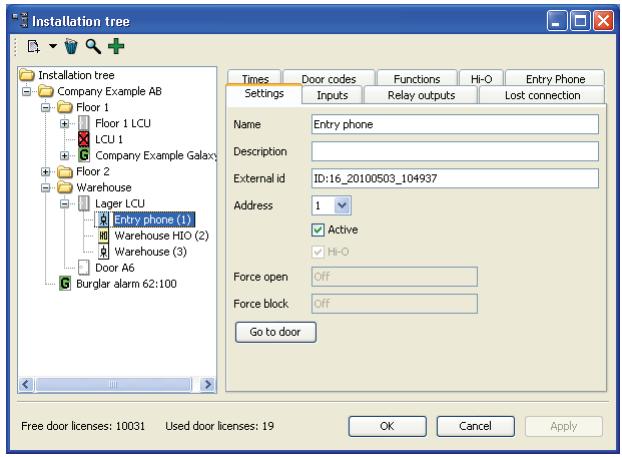
Entry DAC options

When you have highlighted a entry DAC on the left side of the window *Installation tree,* a number of tabs are displayed in the right side of the window that control the *Settings*, *Lost connection*, *Times*, *Door codes*, *Relay outputs, Functions* and *Entry phone* for the DAC. The different options for each tab are described below.

Settings tab

In the tab *Settings* you enter the entry DAC general settings, such as *Name*, *Address*, *External ID* and *DAC-mode,* and whether the DAC shall be Active or not and if it is a Hi-O product. Additionally, information regarding however *Forced open* and *Forced block* is on or off is shown.

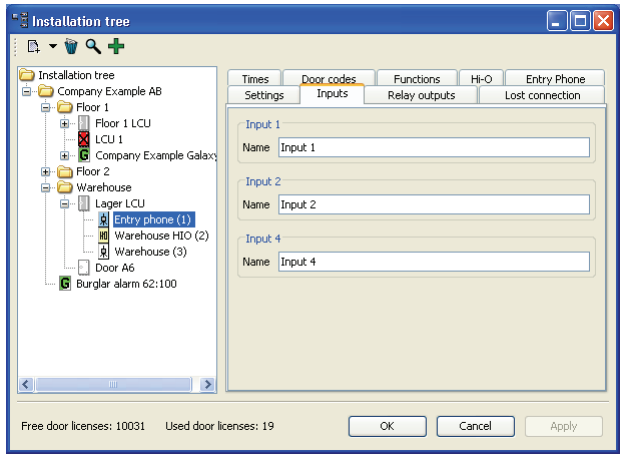
The DAC *Address* consists of a number (from 1 to 8) that indicates which address the entry DAC has in the controller.



Installation tree with the entry DAC tab Settings

Inputs tab

In the tab *Inputs* you can name the three inputs. For example in order to easily see what the input is used for, when used in a trigger or in the Log.

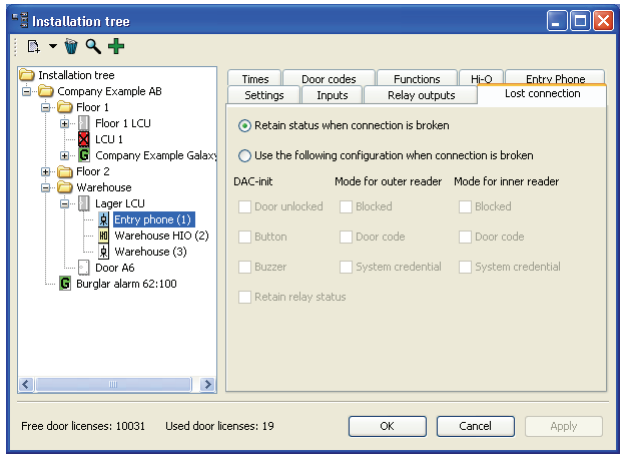


Installation tree with a one door controller, input tab.

Lost connection tab

Under this tab, you can select what will happen when the connection to the entry DAC is broken. The two main options are:

- *Retain status when connection is broken*
- *Use the following configuration when connection is broken*. If you select this option and you can enter which configuration parameters that will apply during a breakdown. The parameters are divided into three groups: *DAC-init*, *Mode for outer reader* and *Mode for inner reader*.



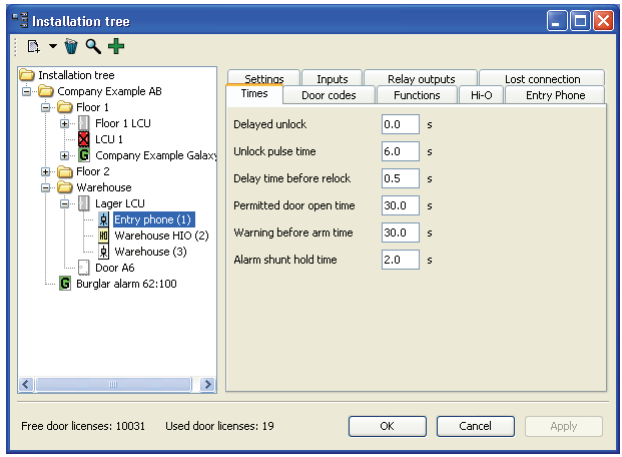
Installation tree with the DAC tab Lost connection

Times tab

Under this tab, you can enter a number of different timer settings for the entry DAC:

- *Delayed unlock*
- *Unlock pulse time*
- *Delay time before relock*

- *Permitted door open time*
- *Warning before arm time*
- *Alarm shunt hold time* (time before the outer lock is engaged after the door has been closed)



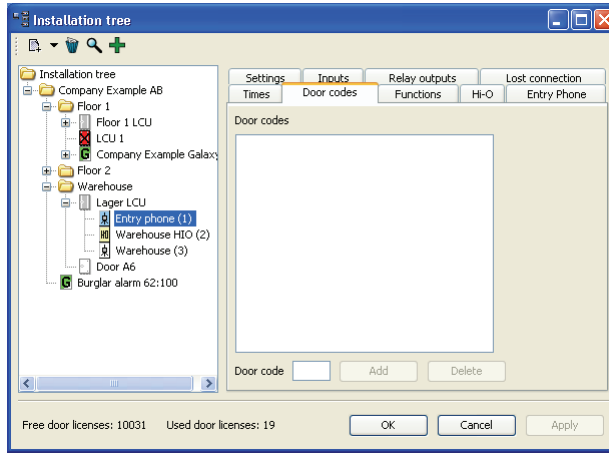
Installation tree with the entry DAC tab Times

Door codes tab

Here you define the four digit door codes that will open the selected door. You can enter up to ten door codes.

A new door code is entered into the field and is saved with the button *Add*.

NOTE! For a door code to work, the door mode for the door is required to be correctly set.



Installation tree with the entry DAC tab, Door codes

Relay outputs tab

This tab has no function on an entry DAC.

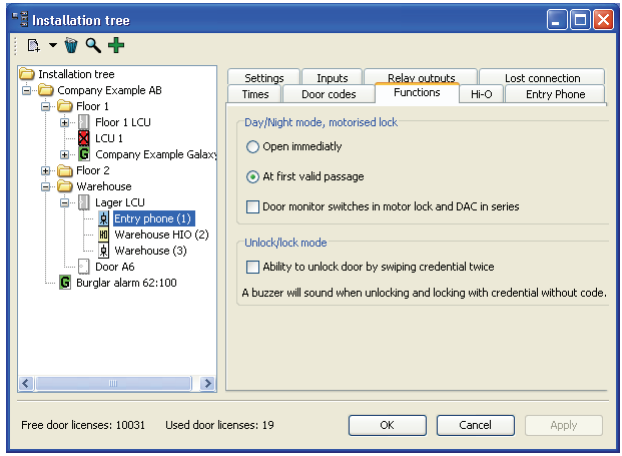
If you want to control relays with an entry phone, you must connect a main DAC to the entry phone, see the entry phone tab.

Functions tab

Under this tab, you can enter a number of parameters for doors.

- For a motorised lock (*Day/Night mode*), you can choose to *Open immediately* or *At first valid passage*. (Not applicable for a entry phone which can not control a motor lock.)

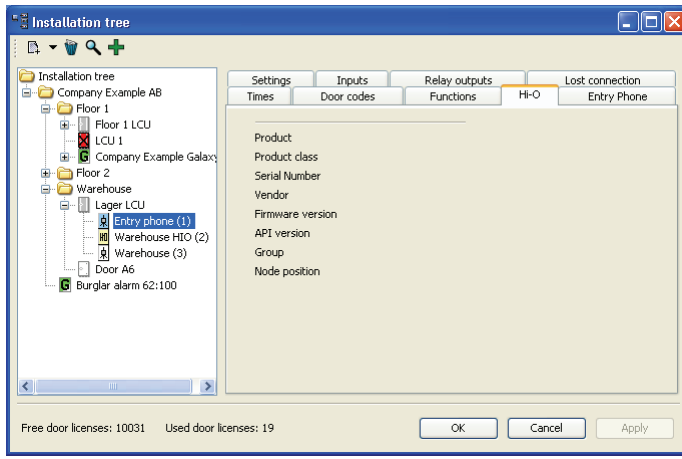
- With the checkbox *Door monitor switches in motor lock and DAC in series* you instruct the system if there are any door switches connected in series. (Not applicable for a entry phone which can not control a motor lock.)
- It is possible to select the unlock/lock mode *Ability to unlock door by swiping card twice*. It is required, however, also that the users who can do this have been assigned an access category with permission to lock/unlock doors. The lock/unlock operation is done by reading a valid card two times in the swipe card reader. (The buzzer then sounds as confirmation)



Installation tree with the entry DAC tab Functions

Hi-O tab

If the the DAC is of Hi-O type, information of the hardware is shown here.



Installation tree with the Functions tab for Entry phone.

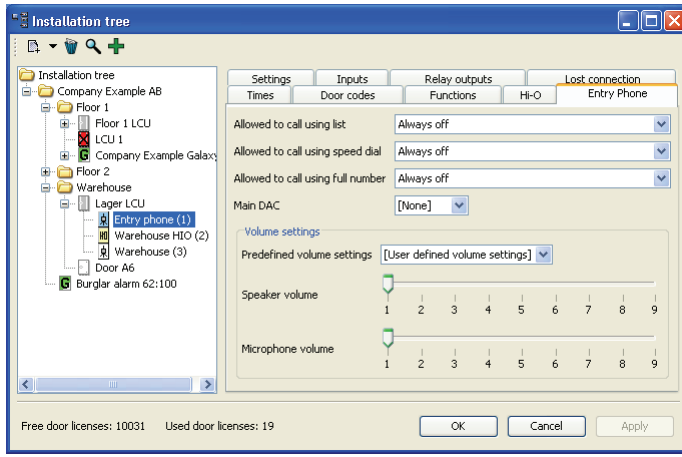
Entry Phone tab

Under this tab, you can enter a number of parameters for entry phones:

- *Allowed to call using list* - if it shall be possible to select and call residents from a list in the entry phone.
- *Allowed to call using speed dial* - if it shall be possible to call a resident using a speed dial number.
- *Allowed to call using full number* - if it shall be possible to call a resident via the entry phone using the resident's phone number.
- *Main DAC* – Specifies if the entry phone is connected to a certain DAC.
  This is useful if you want to add a:
  - Reader for passage out.

- Opening button, not accessible from the outside.
- Motor lock
- Extra relays and inputs

- *Predefined volume settings* – Choose between six different settings for speaker and microphone volume adapted for indoors and outdoors.
- *Speaker volume*
- *Microphone volume*



Installation tree with the entry DAC tab Entry Phone

Booking panel (option)

The booking panel allows access to the booking system in the ARX and manage the booking, for example, of washing machines or conference rooms.

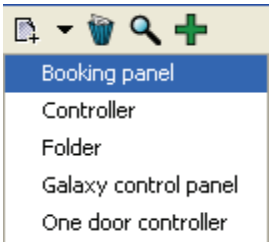
The booking panels are added to the installation through the *Installation tree* and are there linked to a controller. This enables the booking panels to be used to control equipment connected to DACs or relays in the installation. It is possible to mix regular door

with doors that are controlled through the booking system in the same controller.

Add Booking panel

To add a booking panel to the installation tree, do the following:

1. Highlight the folder where you want to place the booking panel.
2. Then select the option *Add* in the windows menu bar, and click *Booking panel*.



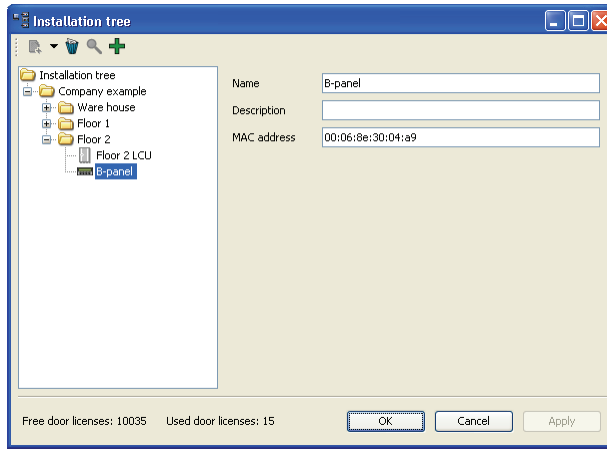
Menu for adding Booking panel

3. The booking panel symbol is now shown to the left in the installation tree and to the right the booking panel options are shown.

Booking panel options

When you have highlighted a booking panel on the left side of the window *Installation tree,* the options are displayed in the right side of the window.

Here you set the *Name, Description* and *MAC address* for the booking panel. That is, the identity the booking panel uses on the network. The MAC address can be found on the back side of the actual booking panel.



Window Installation tree with settings for a booking panel

The booking panel hardware consists of a touch screen that communicates with the booking function on the ARX server. The users of the access system reach *My pages* from the panel and can manage bookings, cards and passwords.

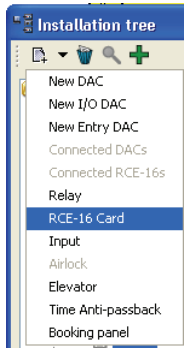
RCE-16 board (option)

RCE-16 is a board with 16 relays that can be used to control external systems. Examples are buttons in an elevator or locks on post boxes or for triggers.

Add a RCE-16-card

To add a RCE board to the installation tree, do the following:

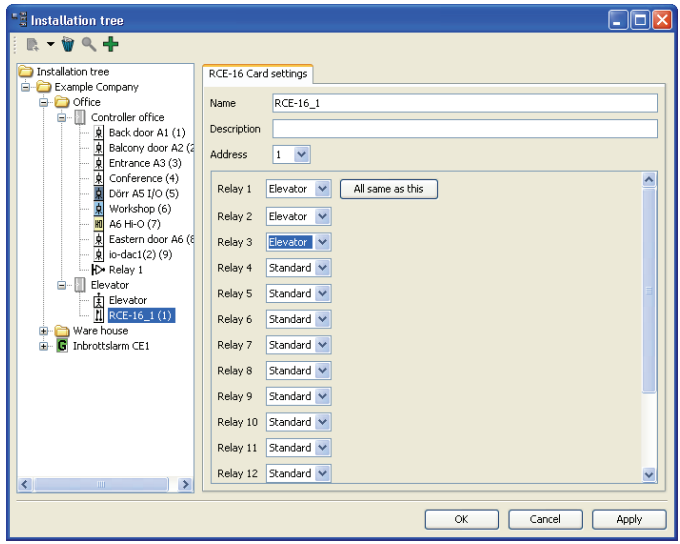
1. Mark the control units in the installation tree that the RCE board is to be connected to.
2. Then select the alternative *Add* in the window's menu bar and click on *RCE-16 Board*.



Menu for adding a RCE board

When a RCE-16 board has been added to the left in the *Installation tree* window, the *RCE-16 Board characteristics* is shown on the right.

On the tab the *Name* of the relay board is given, a short *Description*, the *Address* as well as the user area that the relays of the board should have.



Installation tree with RCE-16 board

Elevator (option)

With the optional feature *Elevator* installed it is possible to add elevators to the *Installation tree* (and floors in the *Access areas* window).

The option *RCE-16 Board* must be installed.

In the *Installation tree* you can add one elevator per controller. The possibility to add an elevator is dependent of if there is a relay card configured for elevator use in the installation. The involved controller must have one or more DACs connected to it.

Note! At least one RCE-16-card must be installed on the controller, before you can add an elevator.

Add Elevator

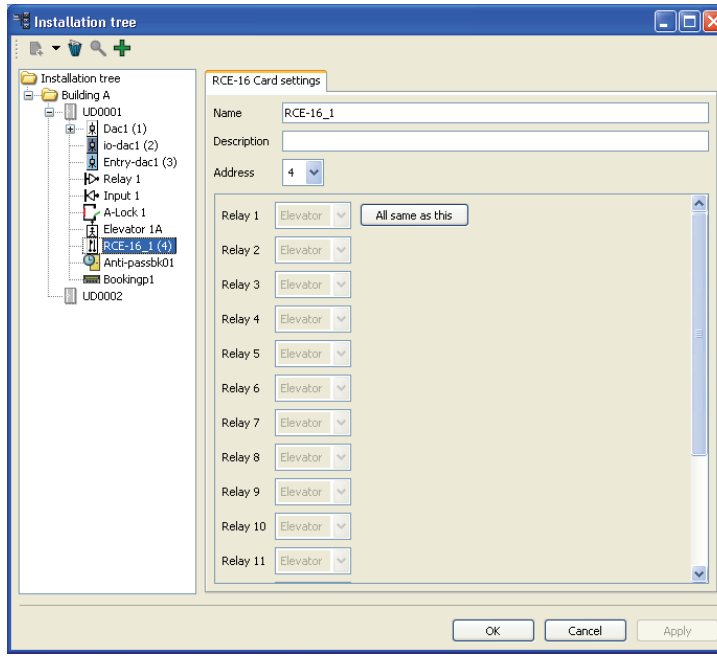
To add an elevator to the installation tree, do the following:

1. Highlight the controller that the relay card shall be connected to.
2. Then select the option *Add* in the windows menu bar, and click *RCE-16 card*.

Popup menu for adding RCE-16 card

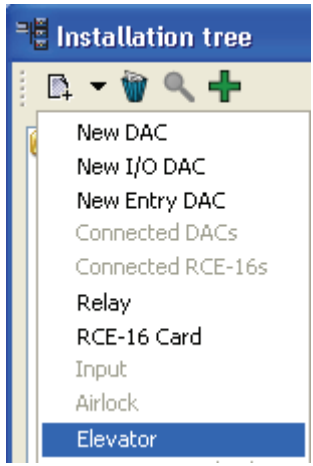
The symbol for the new relay card is now added to the tree structure on the left side of the *Installation tree* window.

When you have added an RCE-16 relay card to the *Installation tree,* the tab *RCE-16 card settings* is shown. Here you should enter the *Name* of the relay card, a brief *Description*, the cards *Address* and what the relays on the card shall be used for.



The installation tree with RCE-16 card highlighted

3. Then select the option *Add* in the windows menu bar, and click *Elevator*.



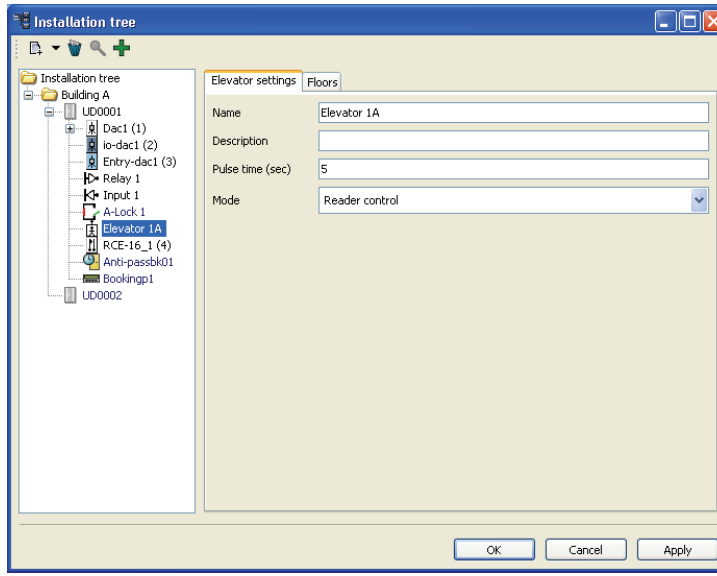
Popup menu for adding Elevator

4. The symbol for the new elevator is now added to the tree structure on the left side of the *Installation tree* window.

When you have added an elevator to the *Installation tree,* a number of tabs are displayed in the right side of the window. These taps control the *Elevator settings* and *Floor* for the elevator. The different options for each tab are described below.

Elevator settings tab

Here you find all the basic settings for the booking panel. On the right side of the window, enter the reader *Name*, a short *Description*, *Pulse time* (in seconds) and in which *Mode* the elevator should operate.



Installation tree with Elevator highlighted (Elevator settings tab)

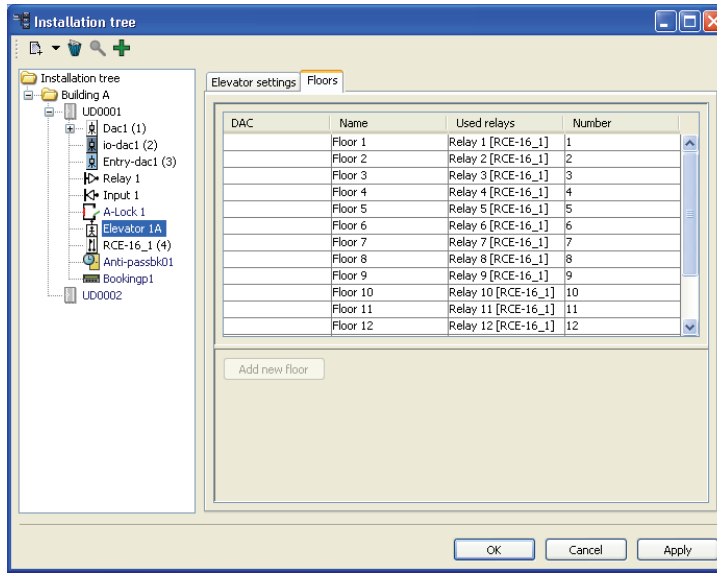
The differences between the two *Mode* options *Reader control* and *Switch control* are these:

- **Reader control,** means that the visitor first selects a floor and then swipes the card.
  If the visitor does not have access rights for the selected floor the reader alerts and the elevator will not move.
- **Switch control**, means that the visitor first must swipe his/her card. Then the system lights up the buttons (i.e. makes available) that represent the floors for which the person have access to.

Floor tab

When you have added an elevator to the *Installation tree* the system automatically adds a number of floors, based on the relays that are configured as elevator relays.

If you want to delete a floor, select the *Delete floor* button in the lower part of the window. In order to create new floor levels click the *Add new floor* button. Please note that the *Add new floor* button only is active if there is a available relay.

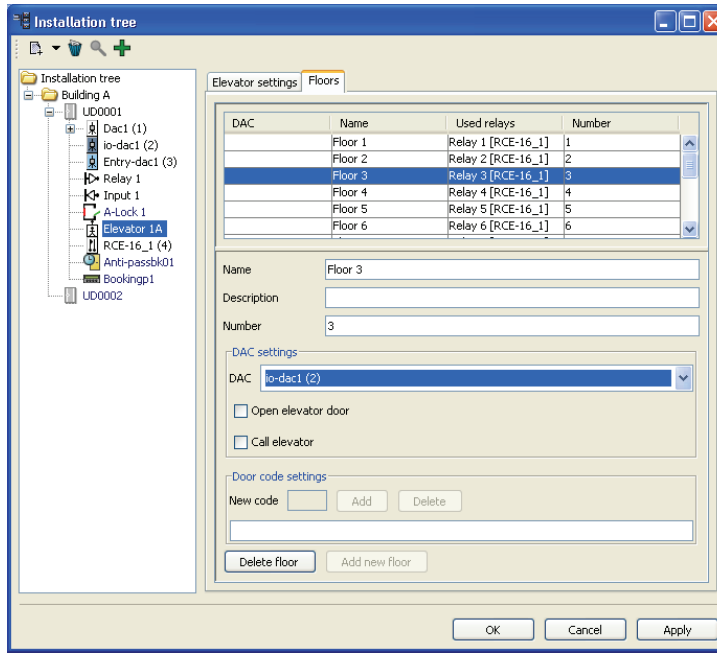


Installation tree with Elevator highlighted (Floor tab)

DAC settings

When a elevator is highlighted in the installation tree and the *Floors* tab active, you can choose to connect floor-specific DACs to the different floors.

If you choose to link a DAC to a floor you can also choose if the DAC should *Open elevator door* or *Call elevator* when the DAC is activated (for example when a visitor swipes the card in a reader connected to the DAC). The function *Call elevator* makes the relay of the RCE-16-card associated to the floor to close, when a visitor swipes the card on the DAC. (Only applicable when using a reader controlled elevator)

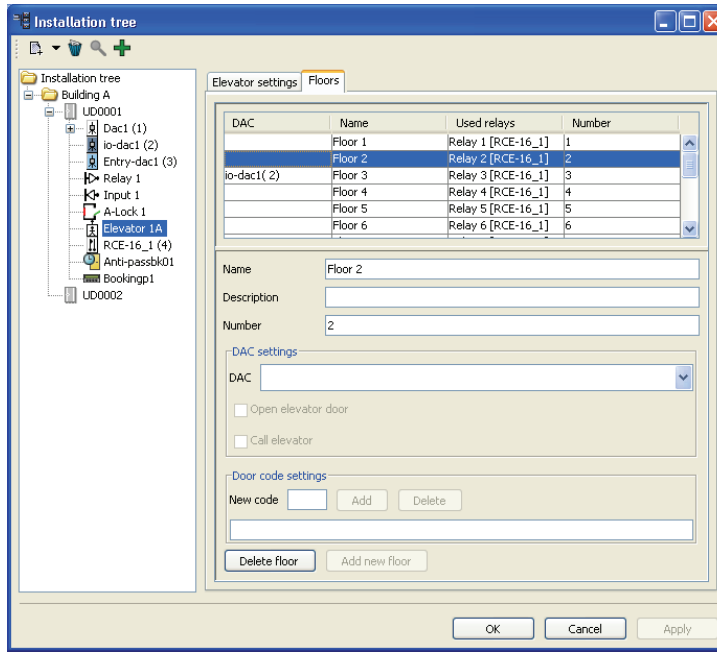


Floor with DAC

Door code settings

For the floors that have no floor-specific DAC linked to them you can choose to add one ore more door codes for the elevator at this floor. This is done in the *Door code settings* field under the *Floors* tab.

To ad anew door code, enter the code in the *New code* field and click the *Add* button. Maximum 10 codes per floor are allowed.



Floor without DAC

Time Anti-passback (option)

Time anti-passback is not hardware, but a function that means that you control how much time must pass between two entrances that are made through the same door with the same card.

This can be valuable in preventing the use of one card used by several people for passing through a sluice for example. (Only one time anti-passback group per controller is allowed)

It is also possible use schedules to control when the time anti-passback function shall be active.

In the standard setting of ARX, an entry is only recorded when a door is opened. However, it is possible to change this setting so that

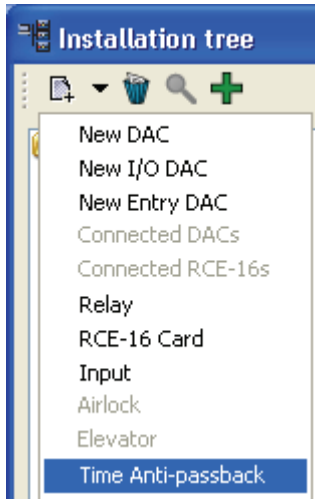
an entry is recorded every time a card is swiped, independent of if the door is opened or not.

NOTE! This feature does not work on a door if the safety level is set to ”Two cards + pin”.

Add Time Anti-passback

To add an time anti-passback to the installation tree, do the following:

1. Highlight the controller that the function shall be linked to.
2. Then select the option *Add* in the windows menu bar, and click *Time Anti-passback*.



Popup menu for adding Time Anti-passback

3. The symbol for the time anti-passback is now added to the tree structure on the left side of the *Installation tree* window.

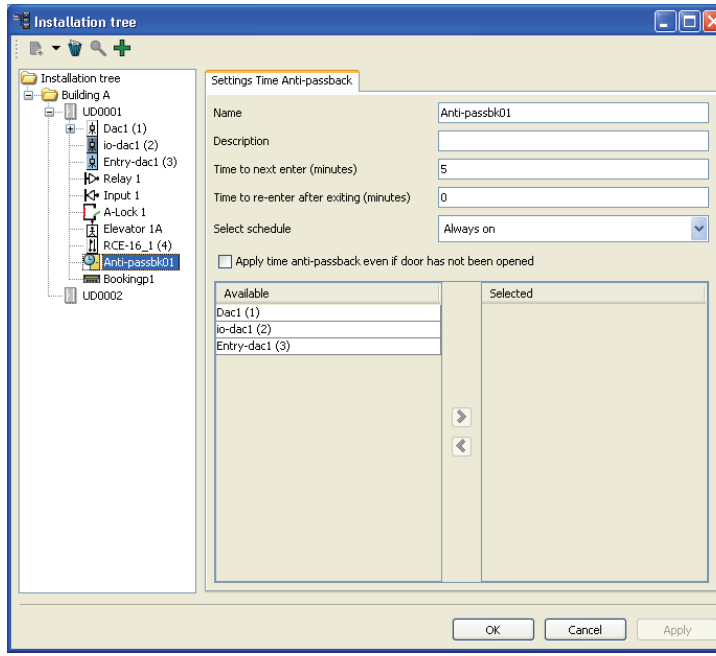
When you have added time anti-passback to the *Installation tree,* the tab *Time Anti-passback settings* is shown. Under this tab you enter the different settings for the function:

- *Name* - A suitable name for the function.
- *Description* - A brief description.
- *Time to next enter (minutes)* - The time period between two entries through the same door, with the same access card.
- *Time to re-enter after exiting (minutes)* - The time period after exiting a door, after which entering is allowed again.
- *Select schedule* - Option to schedule when the time anti-passback function should be active.
- *Apply time anti-passback even if door has not been opened* - This check-box is per default not checked.

Note! When exiting (i.e. passing out) through a door, the settings for entering (passing in) are set aside and the alternative *Time to re-enter after exiting* supersedes. This means that if *Time to re-enter after exiting* is set to 0 (minutes) entry will be allowed even if *Time to next enter* has not passed.

The doors included are specified at the bottom of the settings tab. Select the doors that are to be included in the anti-passback function, and click the right arrow.

The settings made applies for all the doors chosen, as a group.



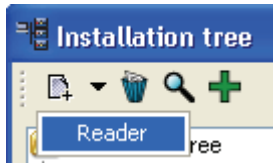
The installation tree with time anti-passback highlighted

Readers

Add readers

To add entry- or exit readers to the installation tree, do the following:

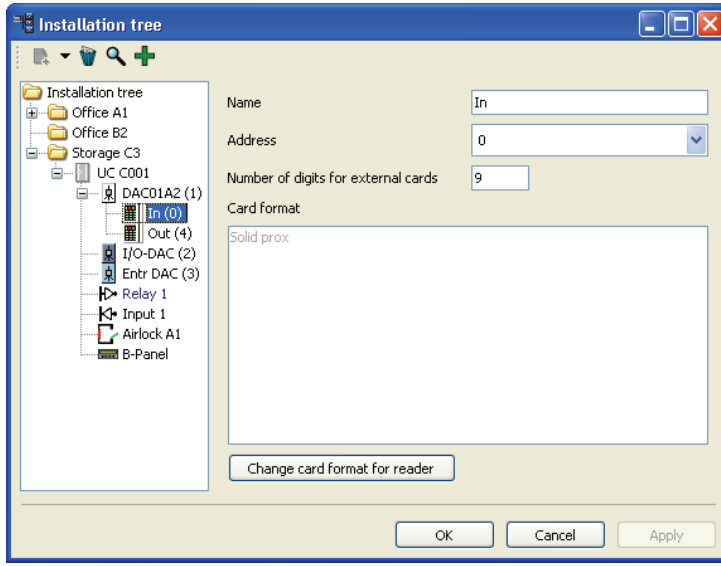
4. Highlight the DAC in the installation tree where the reader is to belong to.
5. Then select the option *Add* in the window menu bar, and click *Readers.*



Popup menu to add readers

6. The symbol for the new reader is now added to the installation tree on the left side of the *Installation tree* window.

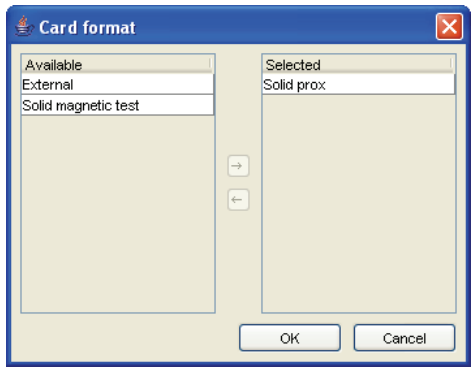
7. On the right side of the window, enter the reader *Name* and *Address* and select *Number of digits for external cards*. (Address 0 = entry readers and address 4 = exit readers.) If you are unsure of how many digits an external card uses, you can test this by reading the card in a connected reader and then read the card number in the log.



Window Installation tree with settings for a new reader

8. Click the button *Change card format for reader* in order to select which card format that is to apply for the reader. (Default card format is Solid prox.)

9. In the window *Card format* that now opens, select a format by highlighting a card format in the left column (*Available*) and with the arrow button "move" the selected format to the right column (*Selected*).



Window for selecting card format

10. Click *OK* in the window *Card format* if you want to save the changes, or click *Cancel* if you want to close the window without saving the changes.

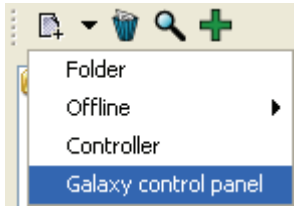
11. In the installation tree, click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window without saving the changes. Click *Apply* if you want to save the changes and at the same time keep the window open.

Galaxy Intrusion Panel

In the installation tree add the Galaxy control units that are available and indicate which ARX control units that are to be connected to every Galaxy control unit. The configuration is then done under the Alarm tree, see page 295.

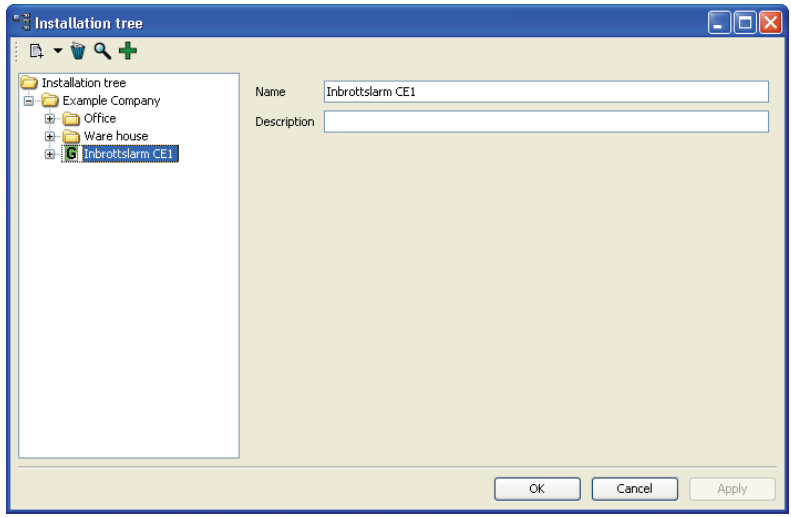
To add a Galaxy control unit, do the following:

1. Mark the level on the installation tree that the unit shall be placed under.
2. Then select the alternative *Add* in the windows menu, and click on *Galaxy control unit*.



Menu for adding the Galaxy control unit

3. The symbol for the control unit is now added to the window, in the installation tree on the left.
4. On the right of the window you *Name* the control unit and write a short *Description*.



The Installation tree with a Galaxy control unit marked

5. Click *OK* if you want to save the changes and close the window. Click on *Cancel* if you want to close the window without saving the changes. Click on *Apply* if you want to save the changes and at the same time keep the window open.

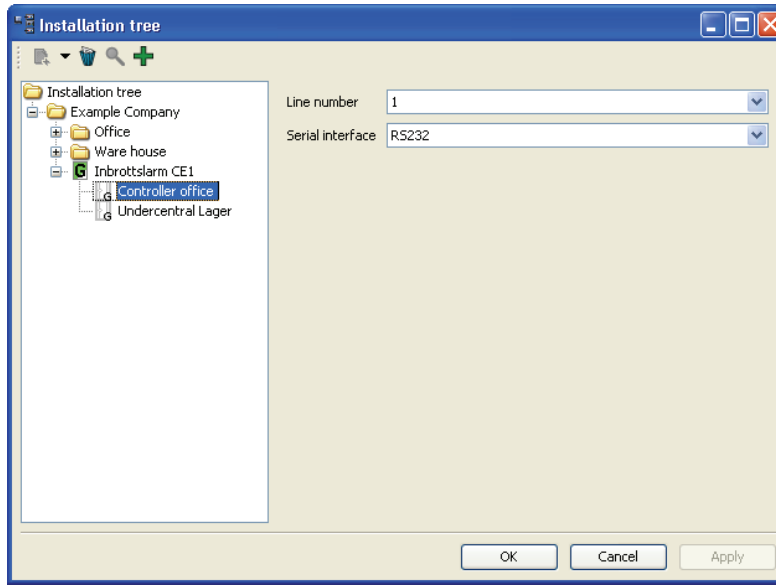
Connect controller to Galaxy Intrusion Panel

To connect a control unit to a Galaxy control unit, do the following:

1. Mark the Galaxy control unit that the control unit is to be connected to.
2. Then select the alternative *Add* on the window's menu bar, and click on *Control unit to line*.

Menu for adding control unit to line

3. The symbol for the control unit is now added to the window, in the installation tree on the left.



The Installation tree with the Galaxy added control unit marked

4. For every control unit that is connected to a Galaxy control unit, indicate which *Communication line* (or dataline) that the control unit should be connected to and which *Serial interface* that should be used.

NOTE! Only one control unit per installation can be allotted to a serial interface. For the remaining control units the alternative; ”*Serial interface: None*”, is allotted.

NOTE! If, in the existing alarm installation (Galaxy), there is already a serial interface that communicates with the Galaxy control unit via a certain serial interface, then it is not possible to choose the same type of interface when selecting a serial interface for a control unit that is being connected in ARX.

For example, it is not permitted to select ”RS232”, as a serial interface for a connected control unit, in case there is already a directly connected external computer (for example, for functional

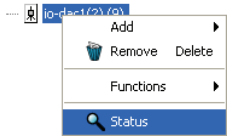
programming), that communicates with the Galaxy control unit via RS232 in the alarm installation.

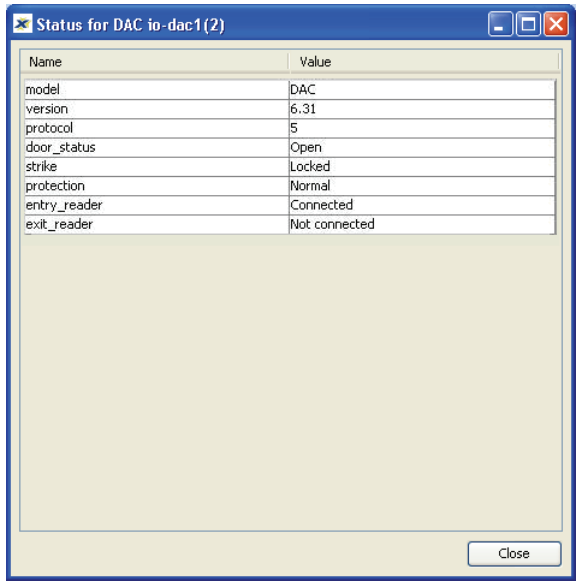
There is also a possibility to replace the physical serial interface RS232 by streaming the traffic, between a PC with the programme Galaxy Gold and the galaxy control unit, over its local network (LAN) via the connected control unit. In this case it is then possible to create a TCP/IP connection with the control units IP address and gateway number 4900, in the programme.

Status

In the installation tree it is possible to get a status for all connected units, and get information, for example, for a DAC that is not working

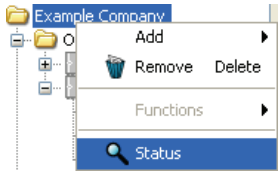
You can get the status for an individual control unit or door control by right clicking and selecting *Status*.



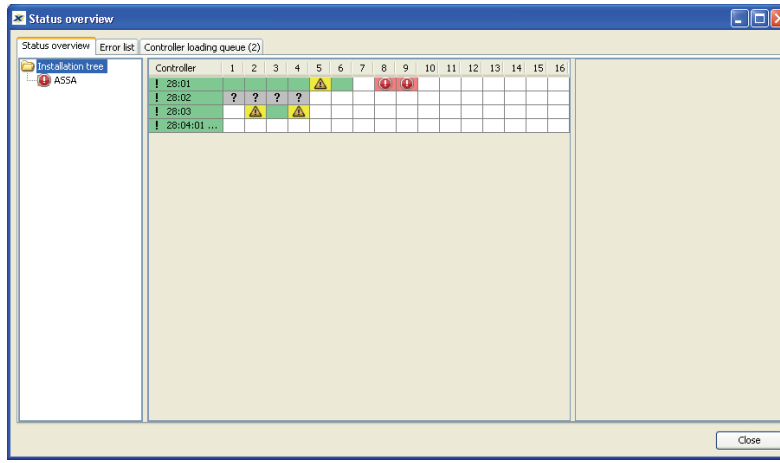


The Status for an individual door control

By right clicking on a directory and selecting status in the menu, the Status window is shown for all installed units in that directory.



The status window shows the status for all installed units in that directory and sub-folders. Only hardware with any kind of error status is visible in the matrix.



The status for all installed hardware.

I the matrix a number of symbols are used depending on the status:

Unit without error

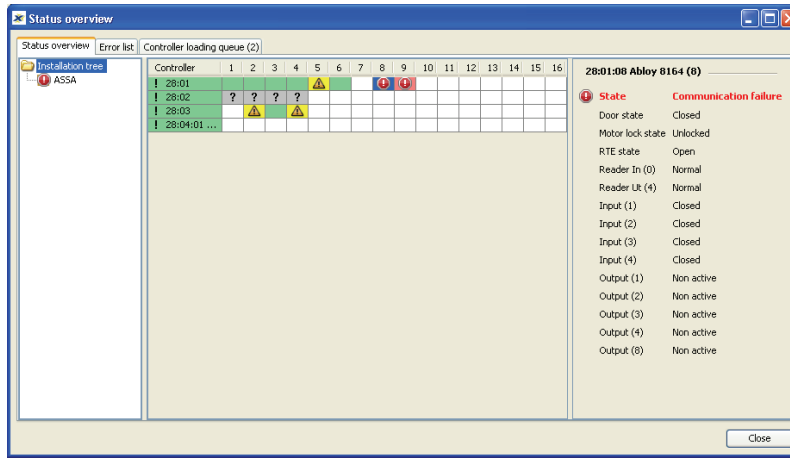
Unit with warning

Units with errors

Units with information (but not considdered as errors)

Units with unknown status

By clicking the symbols in the matrix, information about the error is shown in the right part of the window.



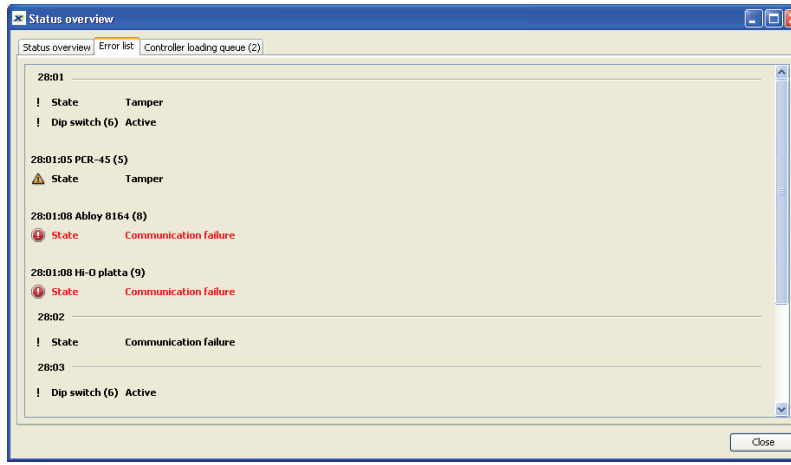
Detailed status information at right

In the main window in ARX the status of the system is displayed. If any error, warning or information is reported the symbol changes according to the image. Click the status symbol to enter directly the status window.

The status symbol to the right in the main window (Normal, warning and error).

The tab Error list

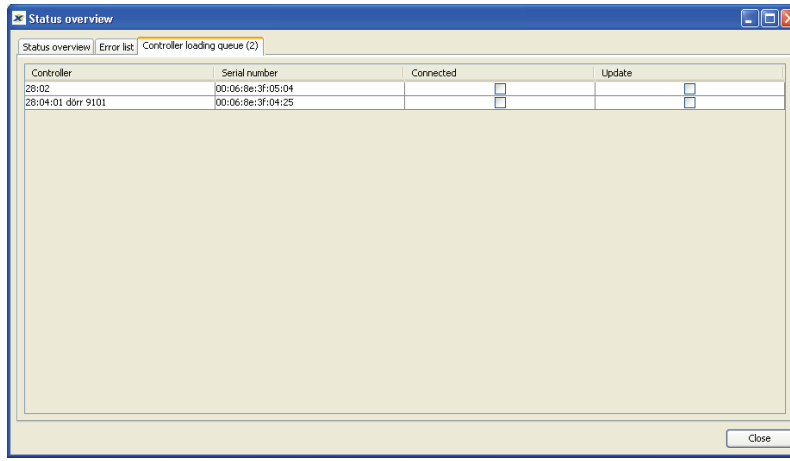
Here all the faults are shown in lists.



Error list for installed units

Controller loading queue

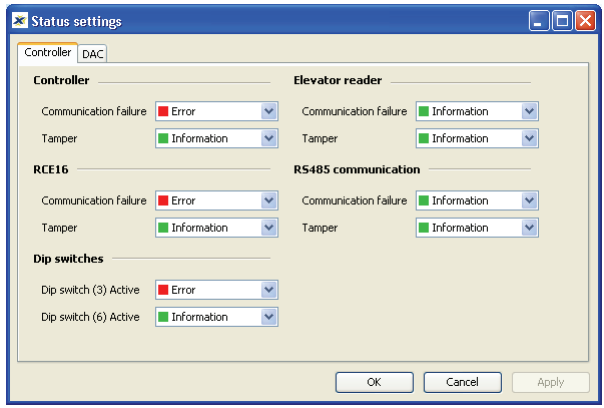
Here the queue for the controllers are that are not currently connected to the ARX server are shown. Next time a link is established the controllers will be updated with new infomaiton from the ARX server.



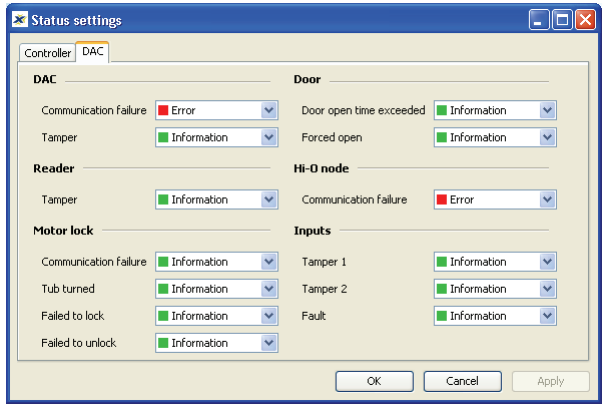
Controller loading queue for installed controllers

Status settings

These settings are located on the System menu. Here the administrator can decide what types of hardware status will generate an error, warning or information message in the status overview window. Normally the default settings are used, but depending on the installation and what level of hardware reports are needed, the administrator can change the settings for status reporting.



Default status settings for controller



Default status settings for DAC

Examples

Adding doors and floors in the installation tree

See the example that also includes how the access areas tree's settings are done in section "Adding doors and floors in the installation tree" on page 286.

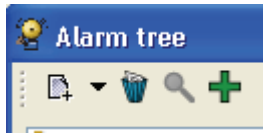
Alarm (option)

About Alarm

You can, in ARX Client software, build alarm zones from with an alarm tree. This is to integrate the access control with the alarm system.

Menu options (Alarm)

To simplify building and customising of the alarm tree, there are a number of extra menu options In the *Alarm tree* window:



Menu option in the window Alarm tree

These are in order of appearance and from left to right:

- **Add**, depending on the level you are at in the tree structure, you can add *Zone* or *DAC* with this menu option. (If a

Galaxy module is installed, it is also possible to add *Galaxy zone, DAC* or *VRIO*.)

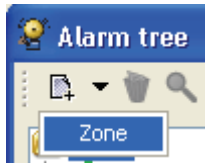
- **Remove**, removes selected object.
- **Expand**, shows the entire tree structure for the selected object.

The menu options *Add*, *Remove* and *Status* can also be made available by right-clicking with the mouse on the desired object in the alarm tree.

Add alarm zones

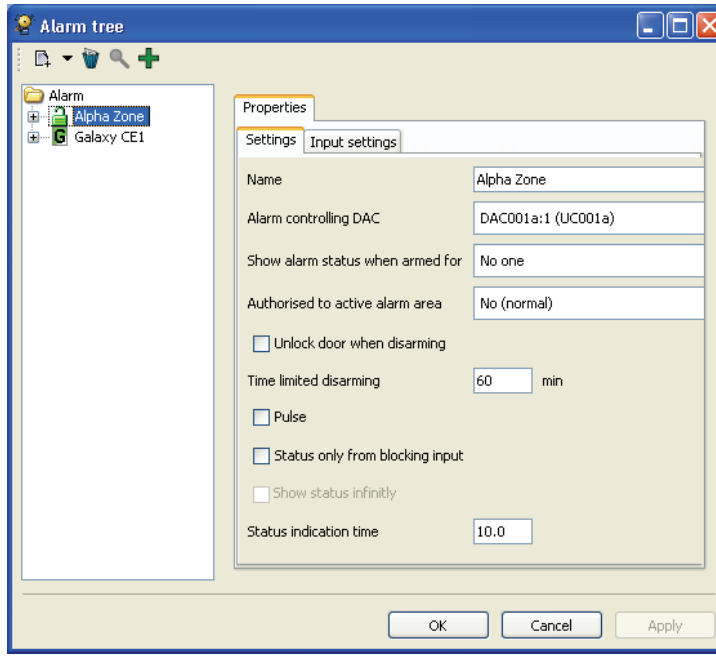
To add an alarm zone, do the following:

1. Highlight the level in the alarm tree where the alarm zone shall be located under. (Initially, there is only one folder, *Alarm*.)
2. Select the option *Add* in the windows menu bar, and click *Zone*.



Drop down menu option to add an alarm zone

3. The symbol for the new alarm zone is now added to the alarm tree on the left side.
4. On the right side of the window, from the tab *Settings*, enter a *Name* for an alarm zone and enter which unit shall be an *Alarm controlling DAC*.



The alarm tree with an alarm zone, the tab Settings activated

5. Click *OK* if you want to save the changes and close the window. Click *Cancel* if you want to close the window without saving the changes. Click *Apply* if you want to save the changes and, at the same time, keep the window open.

Settings for alarm zones

For each alarm zone there are a number of configuration options. These options are located under the two tabs: *Settings* and *Input settings*.

Tab Settings

From the tab *Settings,* you can in addition to defining the *Name* and *Alarm controlling DAC,* also make a number of choices to customise your alarm zone:

- You can define which users that the status is displayed for, by selecting the option *Show alarm status when armed for*. The default option is *No one* and the option *Authorized users* means users with alarm clearance. It is also possible to select *All*.
  This option enables red alarm status alert and a red light when the alarm is activated.
- Conditions for *Authorized to activated alarm zone*. The options are *No (*which means blocked when the alarm is activated), *Alarm authorized*, *Alarm authorized with PIN*, *Alarm authorized with warning* or *Alarm authorized with PIN and warning*.
  If *No* is not selected it means that you can enter a door to a area with the alarm active if you have a card with alarm access. This is normally used when you are managing the alarm from a manouver panel inside this door.
- The *Unlock door when disarming* option allows the door to be automatically unlocked when disarming the alarm at the card reader of this door.

  Note! If the door does NOT unlock with this option enabled, the option at the bottom in the window, *Time for showing status* must be increased. Time for showing staus also decide how long time the DAC waits for an answer from the alarm central.
- In the field *Time limited disarming* you define how long a sale of alarm time will last.
- With the checkbox *Pulse* you can enable the pulse option.
- With the checkbox *Status only from blocking input* you can select how alarm status is shown.

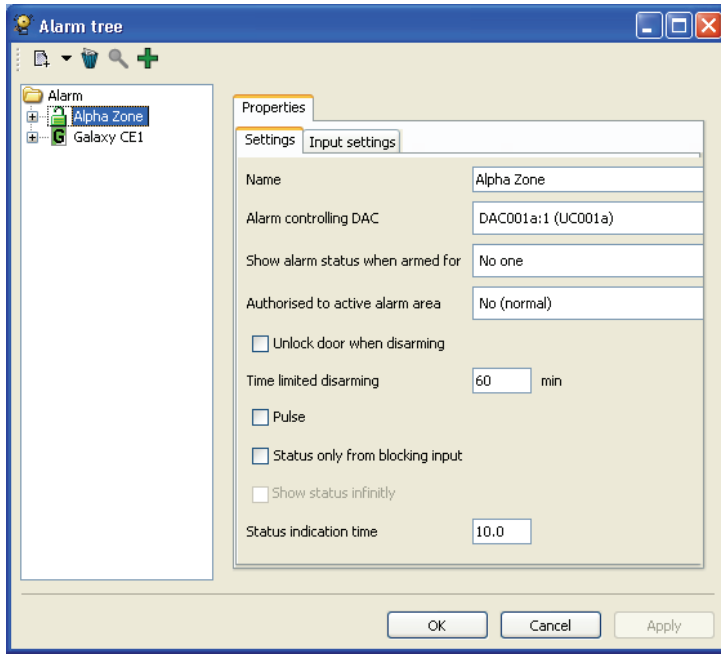
Note! *Status only from blocking input* and *Show status infinitely* does not work on an elevator reader.

To manage an alarm for a floor from the elevator reader:

1. Press A/B + <Floor>
2. Swipe the card
3. Enter PIN code

- In the field *Statis indication time* you define how long the status for the blocking input is displayed on the reader after entering the PIN code. The time is defined in seconds.

  Note! Time for showing status also decide how long time a DAC waits for answer from the alarm central for automatic unlocking of a door when disarming the alarm. See function *Unlock door when disarming* above.



The alarm tree with an alarm zone, the tab Settings activated

If a pre-alarm is wanted at activation of a alarm zone, it can only be done by selecting relay function 13 on the main DAC.

Tab Input settings

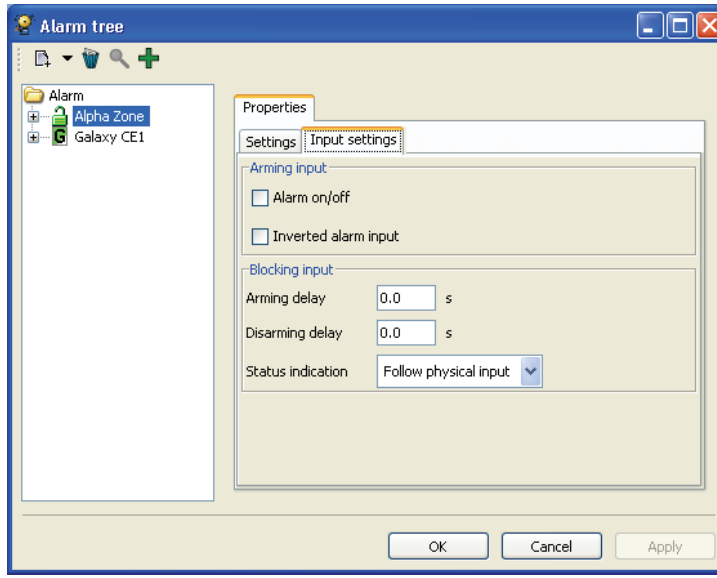
From the tab *Input settings* you can select function on the input connection (Inp 4). When no function is selected connection is performed when Inp 4 is closed:

- *Alarm On/Off*
- *Inverted alarm input*

For the blocking input you can define:

- The time for any *Arming delay* and *Disarming delay*. The time is defined in seconds.

- How *Status indication* is to occur, use the *option Follow physical input* or *Follow blocking delay*.

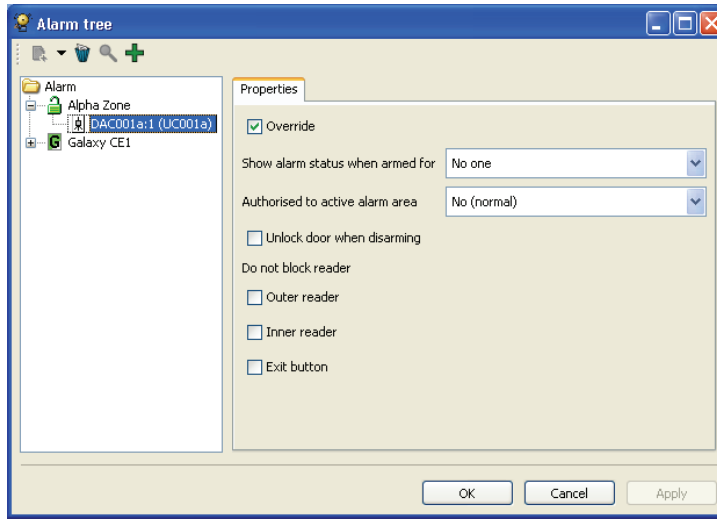


The alarm tree with an alarm zone, the tab Input settings activated

Alarm settings for DAC

For the DAC that is an alarm controller in an alarm zone, there are a number of configuration options that can be made individually per DAC.

To change some of these properties you must first check the checkbox *Override.*



The alarm tree with properties for alarm controller DAC

Configuration options for an alarm controller DAC are:

- *Show alarm status when armed for*, this defines which users shall be shown the activated alarms (options are *No one*, *Authorized users* or *All*.)
- *Authorized to active alarm area* defines who has access to an area with an activated alarm. (The options are *No (normal)*, *Alarm authorized*, *Alarm authorized with PIN*, *Alarm authorized with warning* or *Alarm authorized with PIN and warning*.)
- *Unlock door when disarming*
  Finally, you can select if any equipment is not to be blocked during an alarm: *Outer reader*, *Inner reader* or *Exit button*.

Galaxy alarm zone

In the alarm tree it is possible to add Galaxy alarm zones and allot which alarm groups that are valid for the actual zone. Before this can be done it is necessary to configure the Galaxy control units and attached control units in the *Installation tree* (see page 275). Then these will automatically be shown in the structure of the alarm tree.

In the ARX it is possible to indicate that a control unit shall act as a virtual RIO, even called a VRIO. This means that the control unit communicates with the Galaxy system in the same way as a traditional Galaxy-RIO does.

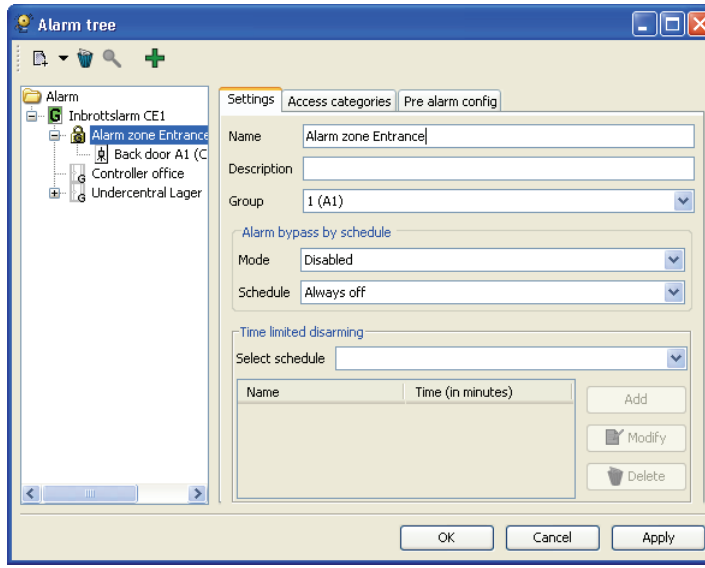
Add Galaxy alarm zone

To add a Galaxy alarm zone, do the following (A Galaxy control unit must be put in the Installation tree before this can be done.):

1. Mark the Galaxy control unit that the zone is to belong to.
2. Then select the alternative *Add* in the window's menu, and click on *Galaxy alarm zone*.

The Menu for adding an alarm zone

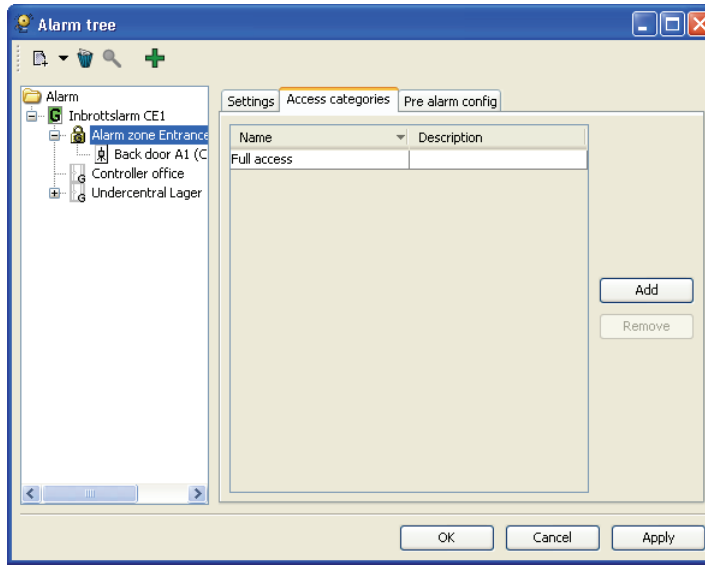
3. The symbol for the alarm zone is now added to the window on the left.



Galaxy alarm zone marked and the tab Settings is active

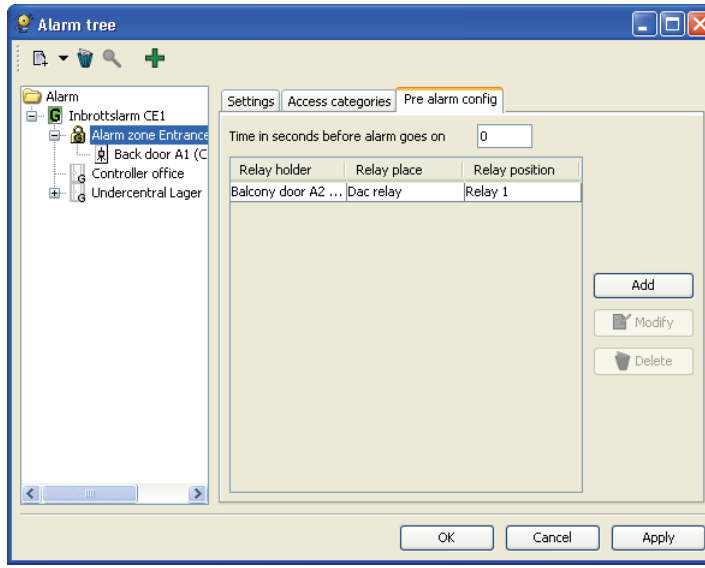
4. In the window on the right under the *Settings tab* enter a *Name* for the alarm zone and write a short *Description*. In addition indicate which *Group* (Galaxy alarm group) the current zone belongs to, the conditions for the *Schedule controlled alarm by-pass* as well as the settings for *Buy alarm time*.

5. In the same window under the tab *Access categories*, it is possible to add access categories that should apply to control the alarm zone. Click on the button *Add* in order to select which category that is to be added. Mark a category and then click *OK*.



Galaxy alarm zone with the tab Access categories activated

6. Under the third tab, *Pre-alarm*, it is possible to adjust *Warning time in seconds before the alarm is activated* and also connect one or more relay outputs to the alarm zone.
   NOTE**!** The pre-alarm does not sound if the alarm is activated via a Galaxy MAP.



Galaxy alarm zone with the tab Pre-alarm activated

7. Click on the button *Add* in order to select which relay output and which unit (control unit or DAC) should be added. Mark a unit, state the relay output and then click on *OK*.

8. In the alarm tree window, click *OK* if you want to save the changes and close the window. Click on *Cancel* if you want to close the window without saving the changes. Click on *Apply* if you want to save the changes and keep the window open.

Add DAC

To add a DAC to a Galaxy alarm zone, do the following:

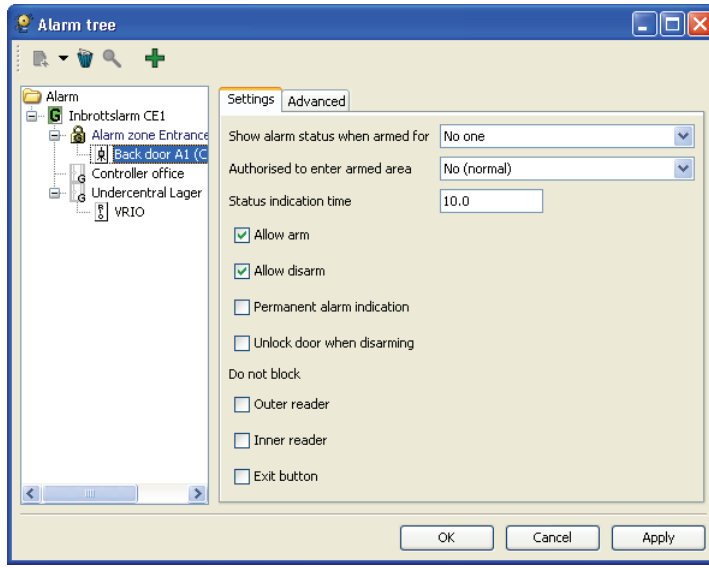
1. Mark the Galaxy alarm zone that the current DAC shall belong to.
2. Then select the alternative *Add* in the window's menu-bar, and click on *DAC*.

Menu to add a DAC

3. In the window that is now open, select which DAC is to be added from the list: *Available DAC*.

   NOTE ! A DAC can not be connected to a Galaxy alarm zone and a standard alarm zone at the same time.
   NOTE ! If there is an elevator in the Galaxy installation it is only possible for each DAC to be contacted to one Galaxy alarm zone.

   Otherwise it is possible for a DAC to be included in several zones. Normally the on-position (to A or B), is controlled the Galaxy group that you want to control. For example if you connect to Group 3: Press B3 + card + pin code. See functions.
4. The DAC symbol is now added to the alarm tree structure.



The alarm tree with a DAC in e Galaxy alarm zone selected

The Settings Tab

Here the alarm settings are given that apply to the current DAC. The first three settings are for the alarm status and access to the alarmed area:

- *Show the alarm status when the alarm is on*, which specify the users the status is visible for. You can choose between: *None*, *Authorised users* or *All*.
- *Access to the active alarm area*, which specify the users who have access to an active alarm area The alternatives are *No*, *Alarm authorized*, *Alarm authorized with PIN*, *Alarm access with a warning* and *Alarm access with PIN and a warning*.
- *Status indication time*, is given in seconds

  Note! Time for status indication also decide how long time a DAC waits for answer from the alarm central for

automatic unlocking of a door when disarming the alarm. See function *Unlock door when disarming* below.

In the same window with the help of five checkboxes, it is possible to select further alarm settings for the chosen DAC:

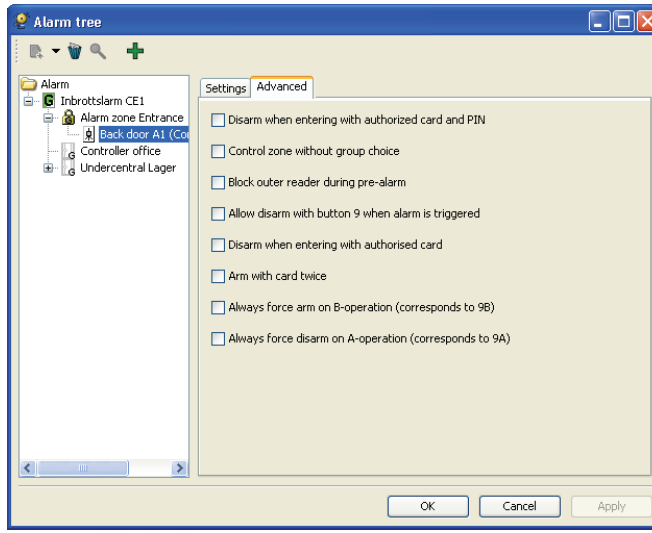
- *Allow alarm activation*
- *Allow alarm deactivation*
- *Constant showing of status*
- *Unlock door when disarming*
  Note! If the door does NOT unlock with this option enabled, the *Status indication time*-option value above must be increased. Status indication time also decide how long time the DAC waits for an answer from the alarm central.

Under *No Blocking* it is possible to choose to allow passage in the door even though the alarm is activated. The basic settings are: no passage allowed when the alarm is activated.

- *Exterior reader,* Allows users to enter when the alarm is on.
- *Interior reader,* Allows users to exit when the alarm on.
- *Exit button,* Allows users to exit by pressing the exit button when the alarm is on.

Advanced Tab

Here the alarm settings are state for the actual DAC:



Advanced Tab

- *Deactivation of the alarm during entrance with alarm access, card and PIN*, normally requires a separate procedure to deactivate (A – card – PIN code). Check this checkbox so that users with the right to deactivate the alarm can do so by swiping their card and entering their pin-code. **Note!** To cancel an activated alarm during pre-alarm time, you must always enter A+card+code.
- *Control the alarm of this zone without selecting a group,* if a door is part of several alarm zones it is normally necessary to indicate in which zone the alarm is intended to be activated/deactivated, by pressing A/B and the zone's group number during the activation/deactivation of the alarm. By checking this checkbox it is not necessary to enter the zone's group number when activating/deactivating the alarm this specific zone.
- *Block exterior readers during the pre-alarm time*, normally entering is allowed during the pre-alarm time. By checking

this checkbox, the exterior readers are blocked for entering the access system when the pre-alarm time has begun.

- *Allow alarm manoeuvre by using button 9 when an alarm is triggered,* normally it is not allowed to acknowledge the alarm from the card reader. Check this checkbox if you want to allow users to be able to acknowledge the alarm by pressing 9 before deactivation of alarm (9A – card - code).

- *Deactivating the alarm when entering with an alarm access card*, normally a special procedure is required in order to deactivate the alarm (A – card – pin code). Check this checkbox in order to allow users with alarm manoeuvre rights to deactivate the alarm automatically at access (according to the valid security level schedule, for example, card or card and code).
  Note! To cancel an activated alarm during pre-alarm time, you must always enter A+card+code.

- *Activate with a card twice,* normally a special procedure is required to activate the alarm (B – card – pin code). Check this checkbox in order to allow users with alarm manoeuvre rights in a certain area to activate the alarm by swiping the same card twice.

- *Always forced activation of the alarm during a B-manoeuvre (Equivalent to 9B),* normally alarm sections are not affected if they are programmed to be excludable when the alarm is activated. Check this checkbox in order for the system to force the alarm activation for all sections. If a door in a certain section is open, this section is excluded if it is programmed to be excludable.

- *Always forced deactivation of the alarm during an A-manoeuvre (Equivalent to 9A),* normally a triggered alarm isn't acknowledged at an alarm deactivation. Check this checkbox in order to automatically acknowledge triggered alarms when deactivating the alarm (A – card – pin code).

Add Virtual RIO (VRIO)

For every control unit connected to Galaxy, it is possible in the alarm tree to add one or several VRIO.

To add a VRIO, do the following:

1. Mark the Galaxy connected control unit that the VRIO-unit belongs to.
2. Then select the alternative *Add* in the window's menu bar and click on *VRIO*.

Menu for adding VRIO

3. The symbol for the new VRIO-unit is now added to the alarm tree.
4. Name the VRIO-unit and indicate which address the unit shall have, on the right in the window. The address is selected between the interval 0 to 15.

NOTE! On communication line 1 in Galaxy, it is usual that the addresses 0 and 1 are already occupied by the control unit. This can differ between various settings and it is therefore safest to check which addresses are not already occupied.

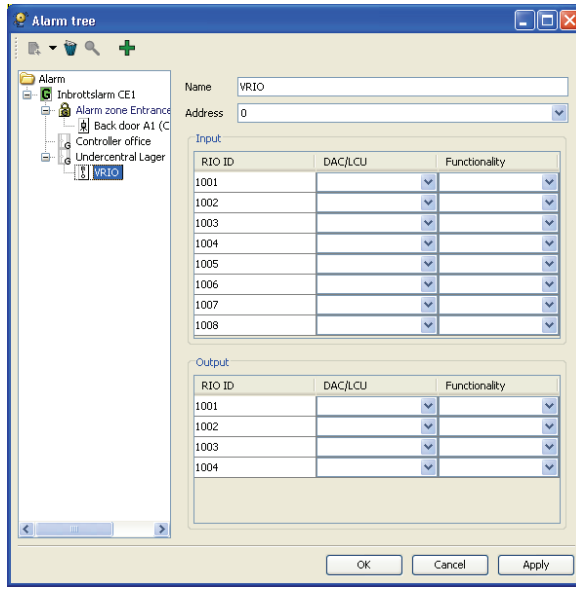
VRIO-inputs

A VRIO-unit has eight inputs. For every one of these you state which type of event should be reported up through the system to the Galaxy control unit.

Which measures should be taken when, for example a door is forced open is decided by the Galaxy control unit and is set in the programme Galaxy Gold.

The input settings are carried out in two steps, first if the event concerns a control unit or a DAC and then which type of event (function) that is to be reported.

For the VRIO-inputs select *Control unit* in the left column, then select between the events *Sabotage control unit* or *External power off (auxiliary power)*.

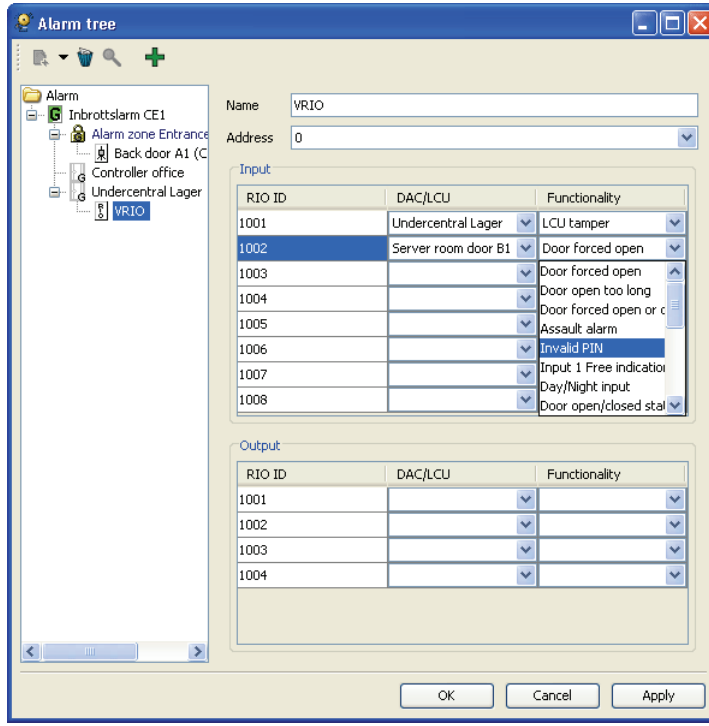


The alarm tree with the choice of VRIO-inputs for the control unit marked

For the VRIO-inputs you select *DAC* you can choose between the events:

- *Door forced*, sounds the alarm if the door is forced, no information with a valid access.
- *Door open too long*, sounds the alarm if the door remains open after valid access.
- *Door forced or door open for too long* (as the two previous steps)
- *Duress alarm*, sounds the alarm when the PIN-code is increased by 1000. (Example: normal PIN ”1234” – duress PIN ”2234”)
- *Invalid PIN*, sounds the alarm at an invalid PIN-code.
- *Inp. 1 Free input.*
- *Day- and night function (motor lock)*, the same physical input as above but will only work if a directly connected motor lock is installed.
- *Door open/shut*, sends the status to the Galaxy control unit even if the access is valid or not.
- *Inp. 2 Free input*
- *Inp. 3 Blocked*
- *Inp. 4 Alarm manoeuvre*
- *Invalid card*
- *Valid card*
- *Button (RTE)*
- *Motor lock bolt out*
- *Motor lock bolt in*
- *Motor lock fault*
- *Follows pre-alarm relay*

- *Sabotage reader*

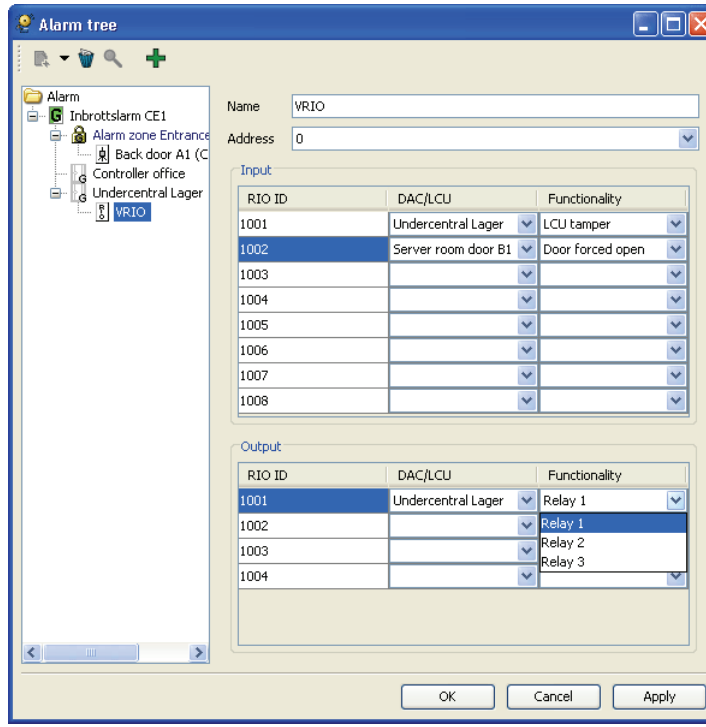


Alarm tree with choice of RIO-input for DAC marked

VRIO-outputs

For the four RIO-outputs that belong to a VRIO you state which type of output it is (*DAC* or *Control unit*) and then which relay that is to be connected to this output. The functions that these outputs have must have been programmed in Galaxy.

If D*AC* is selected there are only four relays to choose from in the beginning and if *Control unit* is chosen there are three relays.



Alarm tree with the RIO-output marked

Firmware

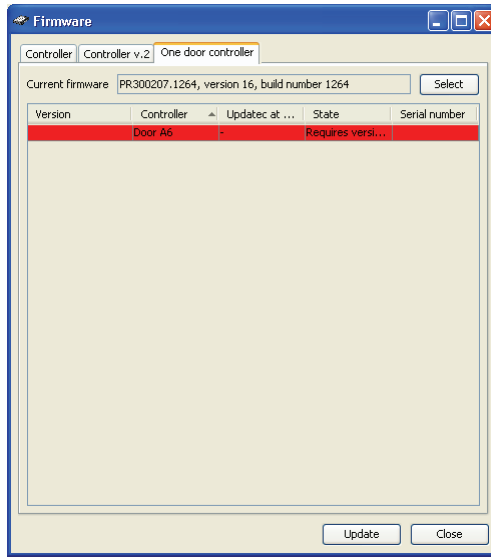
About Firmware

With the *Firmware* feature in ARX it is possible to check which firmware version that is installed and also update the connected controllers' firmware

Check and Update Firmware

To check and update firmware for controllers in ARX, do the following:

1. Select the *Firmware* icon in the main window.
2. In the *Firmware* window that now opens the settings for the connected controllers are shown.

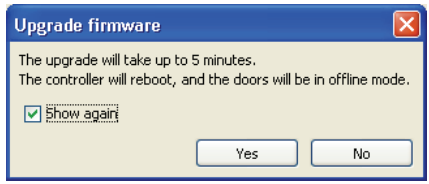


Window System Configuration with tab Firmware activated

To update firmware for one or more controllers, continue with the following steps:

3. Enter new firmware by clicking the *Select* button, highlight the new version in the list that is shown and *OK*. (In the list, the firmware versions that are registered on the server are displayed.)
4. Select the controllers that shall be updated. To choose more than one row, keep the Ctrl key depressed while selecting.
5. Then click on the button *Update*. Now a query window is shown with information that the estimated time for the update (or upgrade) can be up to 5 minutes.

   Note! In systems with many cards, it can take more than 5 minutes per controller.


Upgrade firmware
The upgrade will take up to 5 minutes.
The controller will reboot, and the doors will be in offline mode.
Show again
Yes
No

Query window Upgrade firmware

6. Click *Yes* to start the update or *No* to cancel.

NOTE! When you have clicked *Update* the server will reboot all the selected controllers. Because they are reset, the controllers are also updated with the new firmware.

NOTE! During the update all connected doors will be offline.

NOTE! Updates will be performed in sequence, one controller at a time.

Logs

About Logs

In the ARX there is a detailed log function that the user can study. In the logs, all information is saved for events in the system. These events are all the types of changes that occur in the system, for example, if a new access group is created, a DAC has been connected, or if the settings for readers are changed.

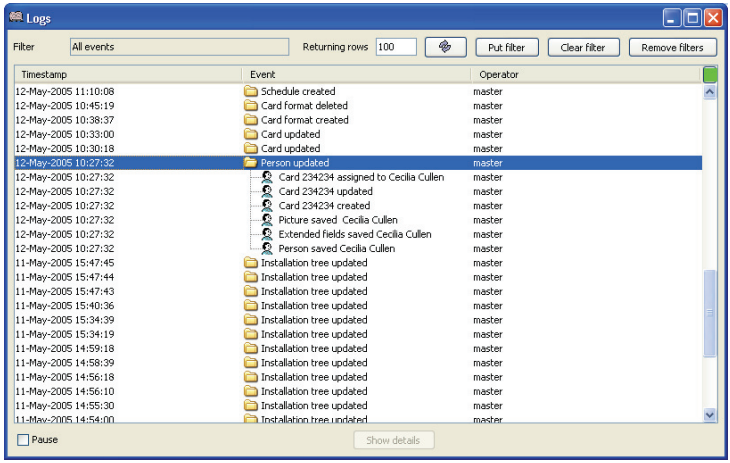
In the function *Logs* there is also the possibility for users to filter and sort the different records in order to more easily study specific periods, types of events or events linked to a specific operator.

If you have the optional feature *Domains* installed you will see the log information for the domains you have permission to access. (If you only have permission for one domain, door passages, for example, in other domains are not visible in your log.)

Show Logs

To show the logs, do the following:

1. Click the button *Logs* in the main window.
2. In the window *Logs* that now opens, a list of the events in the system is displayed.


Logs
Filter
All events
Returning rows
100
Put filter
Clear filter
Remove filters
Timestamp
Event
Operator
12-May-2005 11:10:08 Schedule created master
12-May-2005 10:45:19 Card format deleted master
12-May-2005 10:38:37 Card format created master
12-May-2005 10:33:00 Card updated master
12-May-2005 10:30:18 Card updated master
12-May-2005 10:27:32 Person updated master
12-May-2005 10:27:32 Card 234234 assigned to Cecilia Cullen master
12-May-2005 10:27:32 Card 234234 updated master
12-May-2005 10:27:32 Card 234234 created master
12-May-2005 10:27:32 Picture saved Cecilia Cullen master
12-May-2005 10:27:32 Extended fields saved Cecilia Cullen master
12-May-2005 10:27:32 Person saved Cecilia Cullen master
11-May-2005 15:47:45 Installation tree updated master
11-May-2005 15:47:44 Installation tree updated master
11-May-2005 15:47:43 Installation tree updated master
11-May-2005 15:40:36 Installation tree updated master
11-May-2005 15:34:39 Installation tree updated master
11-May-2005 15:34:19 Installation tree updated master
11-May-2005 14:59:18 Installation tree updated master
11-May-2005 14:58:39 Installation tree updated master
11-May-2005 14:56:18 Installation tree updated master
11-May-2005 14:56:10 Installation tree updated master
11-May-2005 14:55:30 Installation tree updated master
Pause
Show details

Window Logs med current events for the system

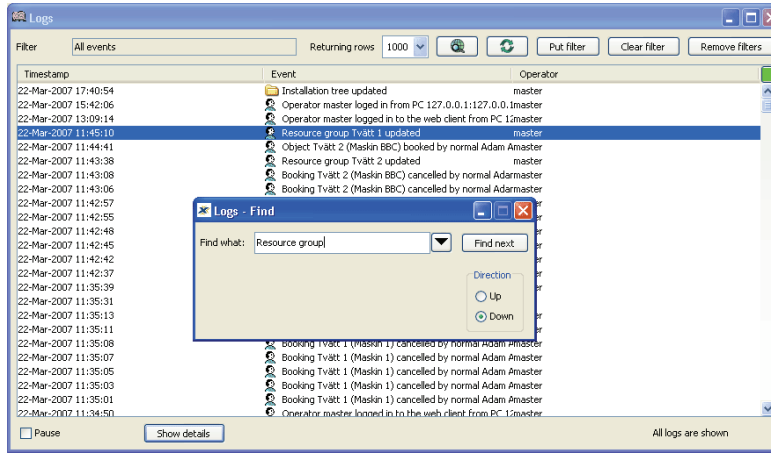
Using the checkbox *Pause,* you can choose to stop the log, or to continue updating the log as soon as anything happens in the system.

Groups of events are shown as folders in the log. It is possible to expand these folders by clicking them.

Search

With the search function a user can rapidly fin a certain word in the headline for each event.

Click the search button.


Logs
Filter
All events
Returning rows
1000
Put filter
Clear filter
Remove filters
Timestamp
Event
Operator
22-Mar-2007 17:40:54 Installation tree updated master
22-Mar-2007 15:42:06 Operator master loged in from PC 127.0.0.1:127.0.0.1master
22-Mar-2007 13:09:14 Operator master logged in to the web client from PC 1master
22-Mar-2007 11:45:10 Resource group Tvätt 1 updated master
22-Mar-2007 11:44:41 Object Tvätt 2 (Maskin BBC) booked by normal Adam Amaster
22-Mar-2007 11:43:38 Resource group Tvätt 2 updated master
22-Mar-2007 11:43:08 Booking Tvätt 2 (Maskin BBC) cancelled by normal Adarmaster
22-Mar-2007 11:43:06 Booking Tvätt 2 (Maskin BBC) cancelled by normal Adarmaster
Logs - Find
Find what:
Resource group
Find next
Direction
Up
Down
Booking Tvätt 1 (Maskin 1) cancelled by normal Adam Amaster
Pause
Show details
All logs are shown

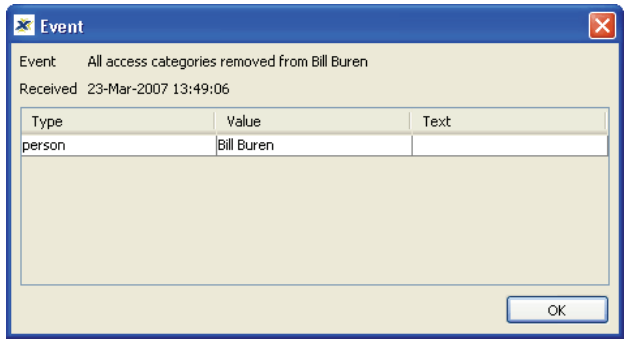
The search function finds words in the headline in the event column

Tip: Search for ”Res” returns ”Resources” as a result. Note that the search function differs between upper and lower case letters.

Show details

To show details about an event, double-click the line in the *Logs* window that corresponds to the event that you wish to see more information on (You can also highlight the line and select the menu option *Show details*.)

A separate window is now opened with detailed information about the chosen event.



Window Event with detailed information about an event

If you double click on the event, you will see the details for this.

This is a very effective way to enter the objects affected by a certain event in the system.

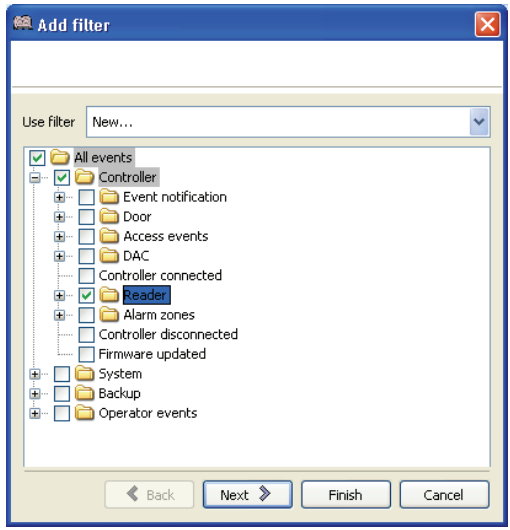
Filter

At the top of the window *Logs* there is the field *Filter* and the associated buttons *Put filter* and *Clear filter*.

These give users the possibility to filter the log information. For example, to study events from a specific period or events linked to a specific operator.

To filter the log information, do the following:

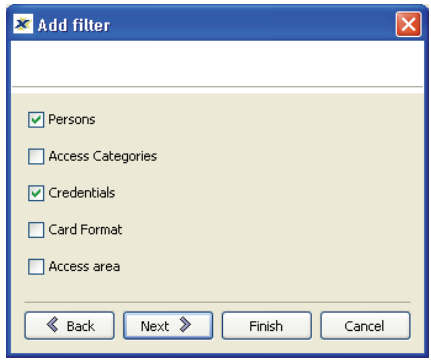
1. In the window *Logs*, click *Put filter* button.



Menu window for creating a filter

2. Select the event types to filter. (Or use an earlier saved filter in the *Use filter* drop down list in the top of the window.)

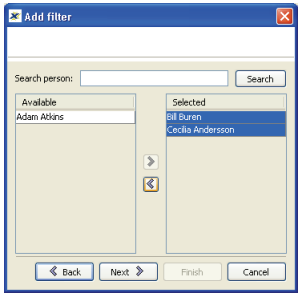
3. Click *Finish* to filter or *Next* to narrow the filtering further (*Users*, *Access categories*, *Credentials*, *Card format* and/or *Access areas*)



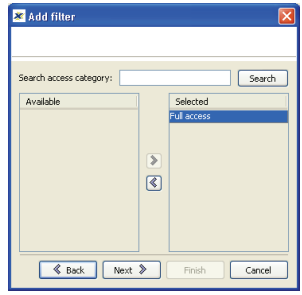
Dialog for further filtering options

4. Choose one or several filtering options and press *next*. Depending on your choice, one, several or all of the following dialogs will be showed:

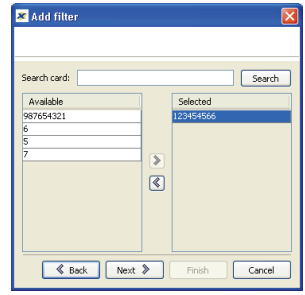
a) Users



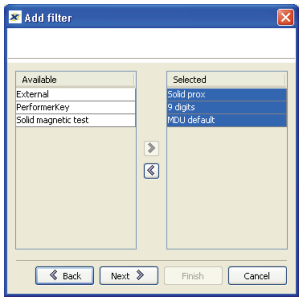
b) Access Categories



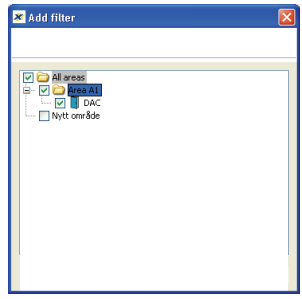
c) Credentials



d) Card Format



e) Access area

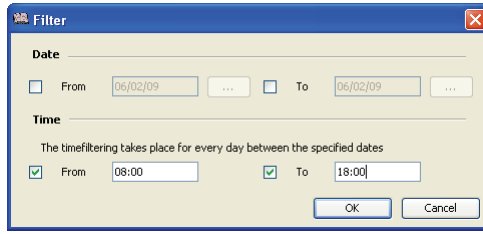


For all dialogs apply: Highlight desired selection in the left column and click the right arrow in the middle of the window to set the filter. Finish by clicking Next or *Finish.*

Example: To filter the log to show all events for a specific person, check *Users* in step 3 and specify this person in step 4 (dialog a).

Note! If you filter the log for a certain person, and at the same time checks to see for example log information for door events, ALL events for the doors will be shown – only person related events will be filtered according to your person filter.

5. You are now prompted to save the filter as a template. Enter name and click *Finish*.
6. In the last window for filter settings, define start and end date for the filter, and a time window for this period.



Window for filter settings

7. Click *OK* if you want to save the settings and close the window. To close the window without saving the input, click the *Cancel* button.

Clear filter

Click on this button to take away the current filter and show all events.

Remove filters

Click on this button to remove some of the filter templates that are saved.

Calendar

About Calendar

By using the *Calendar* function, you can create new or add existing calendars for a year. When you create a calendar, the main steps to define are:

- **Day types**, for example weekday and weekend…
- **Week definitions**, a standard week definition is that you define Monday thru Friday as day type Weekday and Saturday thru Sunday as the day type Weekend
- **Exceptions**, can for example be that Christmas Day on December 25th is an exception to the Weekday day type

The ARX is delivered with a default yearly calendar (*Standard calendar*) that has the basic day types and week definitions already defined.

Add Calendar

In ARX, there is a predefined year template that has basic day types and week definitions already registered.

If you want to create your own calendars, you can choose to use the standard year calendar as a template and customise it to suit your requirements, or you can create a new calendar from scratch.

To create a new calendar, do the following:

1. Select the menu *Tools* in the main window and click the option *Calendar*.

Window Calendar with a list of the calendars that are stored in the system.

2. Click the button *New*.
3. Give the new calendar a name by writing a text string in the *Name* field and also enter a description in the field *Description*.
4. By using the drop-down list menu *Year*, select the year that calendar is valid for.
5. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the

information and at the same time keep the window open and continue adding new information.

Initially, the new calendar is completely empty and you must build it by defining day types, week definitions and any exceptions for the new calendar.

For more information on how to work with *Day types*, *Week definitions* and *Exceptions* in a calendar, see "About Calendar" on page 319.

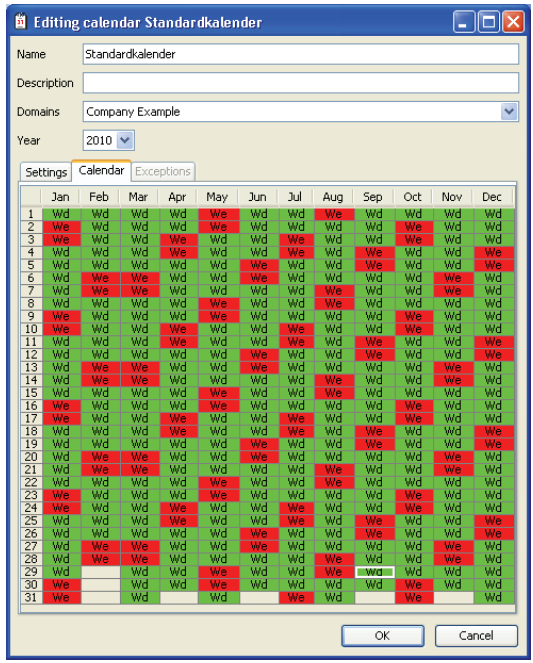
Modify a Calendar

To modify an existing calendar, begin by doing the following:

1. Select the menu *Tools* in the main window and click the option *Calendar*.

Window Calendar with a list of the calendars that are registered in the system

2. Select the calendar you want to edit and click *Modify*.



Window for the selected calendar, with the main tab Calendar activated.

To select the part of the calendar you want to work with, click one of the tabs in the calendar window.

The tabs are *Settings, Calendar* and *Exceptions*. Below is a description of the options that are located under each of the tabs.

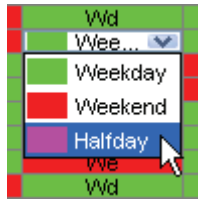
Calendar tab

Under the main tab *Calendar,* you can see the combined calendar for a whole year with the different day types illustrated with different colours.

Modify day type for a specific day

To add the day type for a specific day, do the following:

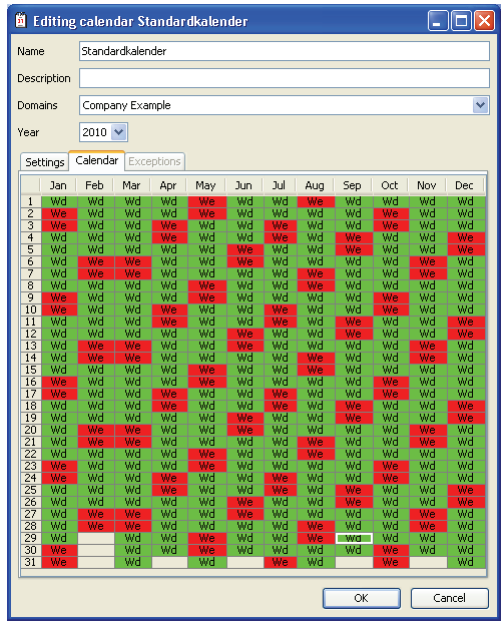
1. Using the mouse cursor, click on the square that corresponds to the specific day on the calendar chart.



Day type menu that is displayed for a selected day

2. In the menu that is displayed, select the day type by scrolling down with the mouse cursor and click the required day type in the list.

The chosen selection is now visible in the calendar window.

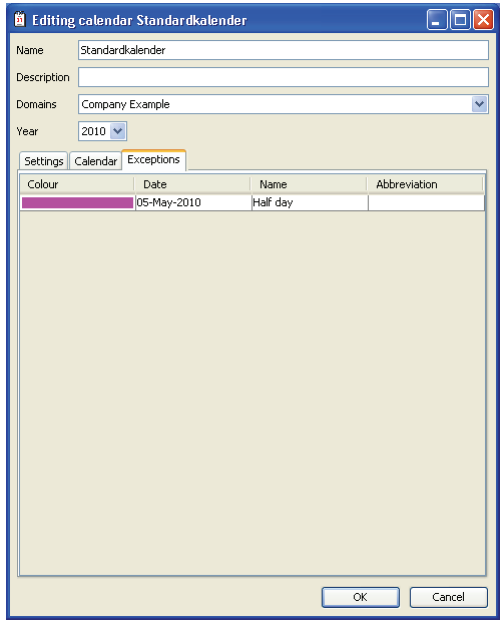


Main tab Calendar activated, displaying one exception (24th December).

3. To save the information and close the window, click *OK*. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and still keep the window open.

Exception tab

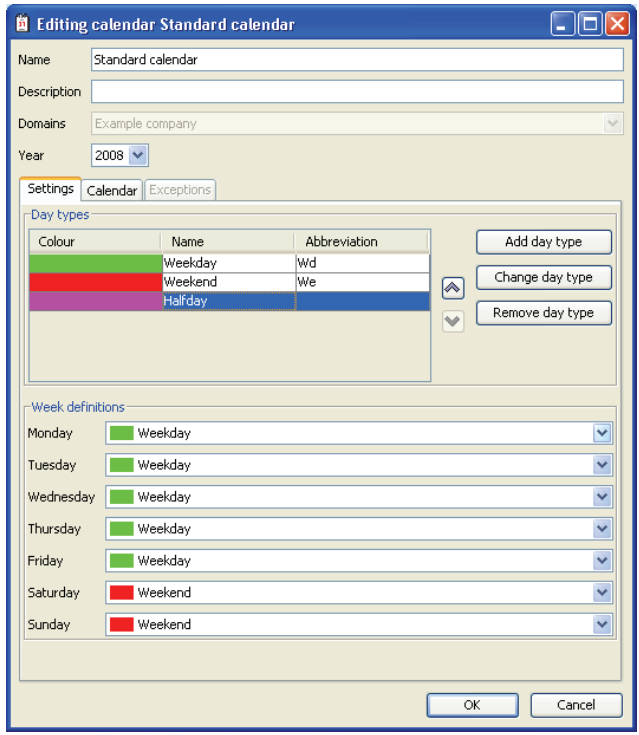
Under the *Exceptions* tab, a list of the days that are exceptions to the week definitions in the standard calendar are displayed.



Tab Exceptions in calendar window with a list of exceptions.

Settings tab

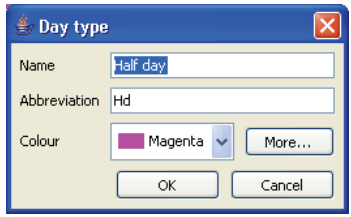
Under the tab *Settings*, you can add, add and remove different *Day types*, and also set all of the day types for a standard week. This is called *Week definition* and is done by linking each weekday to a day type.



Tab Settings in the Calendar window.

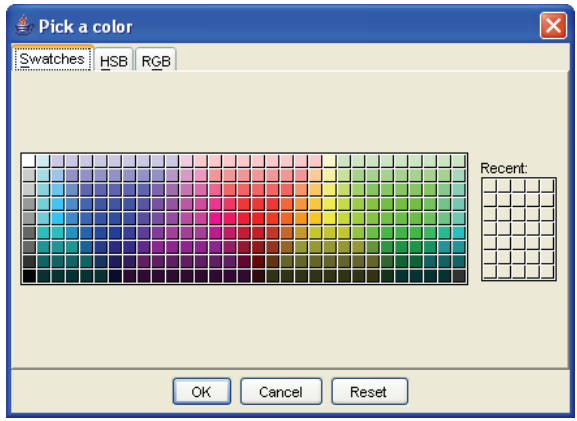
Create new day type

1. Click the button *Add day type*.



Window for new day type

2. Enter *Name* and write an *Abbreviation* for the day type.
3. If you want to select a different colour than the one that is suggested, choose a colour from one of the standard colours using the drop-down list menu *Colour*, or click *More* and select another colour in the window that then opens.



Window for selecting a colour

4. If you choose a new colour, first click on the desired colour and then on *OK* when you have made your choice.
5. Click *OK* in the window for selecting day type.
6. In the calendar window, click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click

Apply if you want to save the information and at the same time keep the window open.

The new day type is now displayed in the list of day types.

Modify day type information

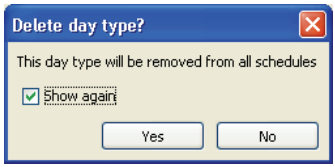
You can, whenever required, change the information that is attached to a day type.

1. Choose the day type you want to change in the area for *Day types* in the calendar window.
2. Click the button *Change day type*.

See "Create new day type" above for more information on how to add a day type.

Remove a day type

1. Choose the desired day type in the area for *Day types* in the calendar window.
2. Click *Remove day type*.



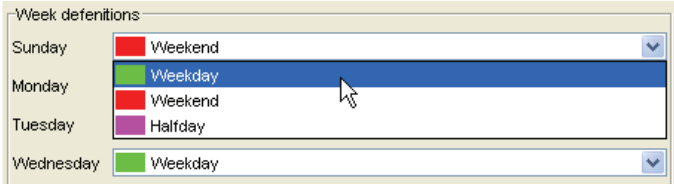
Query dialog to remove a day type

3. Click Yes in the query dialog that appears if you are sure that you want to remove this day type.

Change a week definition

To change a week definition, do the following:

1. In the area for *Week definitions*, click on the field that corresponds to the weekday you want to change.



Week definition, with a list of the different day types

2. In the list that is now shown, click on the new day type you want to add to.

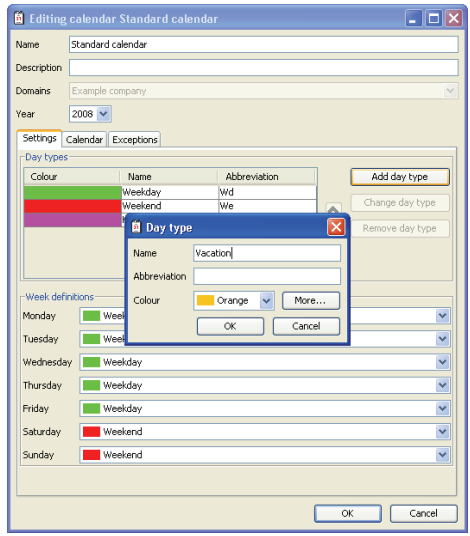
3. In the *Calendar* window, click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

Example

Add holiday to an existing calendar.

The Company Example's standard calendar needs to be complemented with holidays.

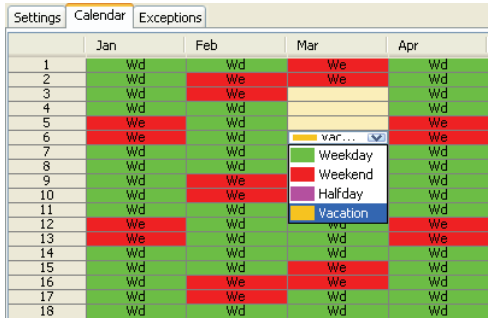
1. Go to the main window for *Calendar* and choose to edit the existing standard calendar.
2. Under the *Settings* tab, click on *Add day type*.



Under settings in the calendar you add new day types.

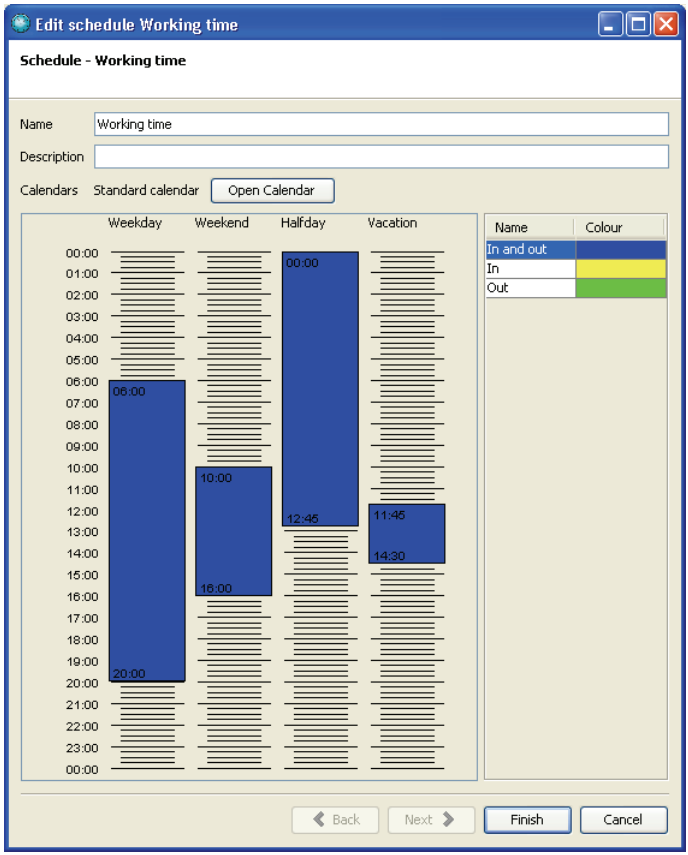
3. Fill in the name, choose colour and click *OK*.

4. Click on the *Calendar* tab and change the days that shall be marked with the new day types.



Under the Calendar tab change the days that fit in on the new day types.

5. Then all the schedules connected to this calendar must be checked and completed since the days added defined as holiday not will have any time settings on the new day type in current schedules.



Under settings in the Calendar, all new day types are added.

Operators, Operator templates and Roles

About Operators, Operator templates and Roles

Everybody with a user account in ARX Client is regarded as an operator. The Roles defines the user right for the operator in the ARX Client. Operator templates define in what domain, the operator has access.

This section explains how to:

- Create Operators, Operator templates and Roles
- Remove Operators, Operator templates and Roles

Operators

By using the menu option *Operators* (in the main windows *System* menu) an administrator can manage other ARX Client software

users (or operators). Here, the administrator can add and remove users.

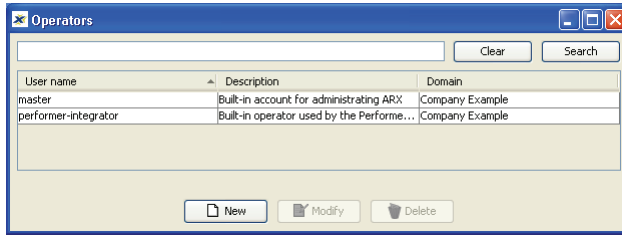
In ARX it is possible to create a number of different users, with different security clearance. For example is it possible to create users that only have clearance to administrate users and cards, or users that only manage the system within a domain (requires the optional feature *Domain*).

An operator that create new users can not create users accounts that have higher clearance that his or her own account.

Add an operator

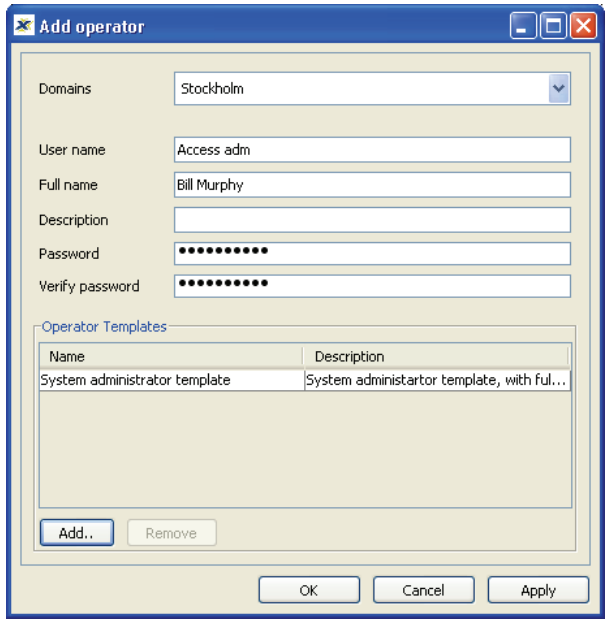
To add a new operator, do the following:

1. Select the *System* menu in the main window and click the option *Operators*.
2. In the window *Operators* click *New* to add an operator.



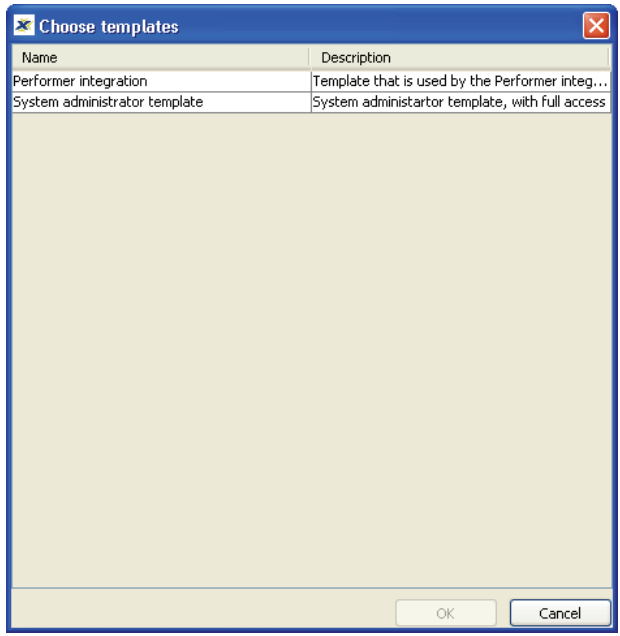
Window Operators with a list of registered users

3. In the window that opens, enter *User Name*, *Full name*, a D*escription* and *Password* (twice). A password must be entered.
   If you have the optional feature *Domains* all new operators are automatically added to the standard domain.
   NOTE! The password field is case sensitive (differentiates between upper and lower case characters).



Window to add a new operator

4. In the Operator Templates section you choose the template for the new operator. (The template defines access to domains and permission for ARX. See chapter Operator templates.)



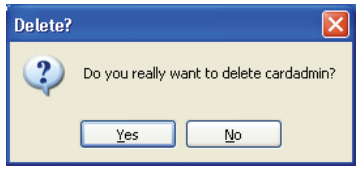
Window to add a new operator

5. Choose a template and click *OK*.
6. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button.

Remove operator

To remove an operator, do the following:

1. Select the *Tools* menu in the main window and click the option *Operators*.
2. In the window *Operators*, highlight the operator profile you want to remove and click *Delete*.
3. If you are sure that you want to remove this operator, click *Yes* in the query dialog that now appears.



Query dialog Delete operator

Operator templates

Using the *Operator templates* menu option (in the *System* menu), a user with the correct user rights can administrate operator templates.

The operator template sets privileges for:

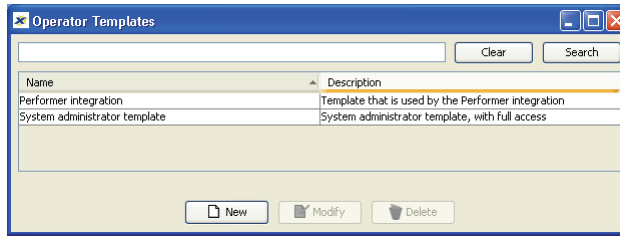
- The domains to be administrated
  (Requires the optional feature *Domains*.)
- The roles applicable for the template
  (That is, the privileges in ARX Client software the operator template will have.)

The operator templates is used when a new user is added as operator, see section "Add an operator" on page 333.

Add an operator template

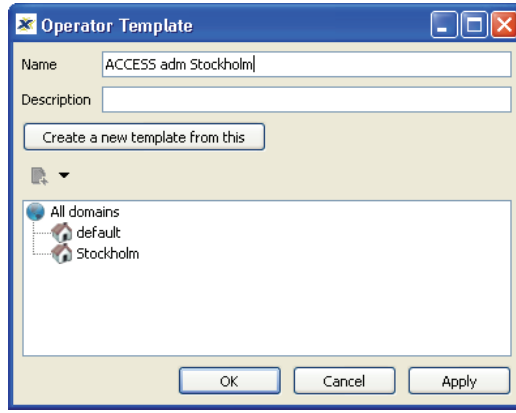
To add an operator template, do the following:

1. Choose *System* - *Operator templates* in the main window.
2. In the window *Operator templates*, click on *New* to add a operator template.



The Operator templates window with a list of available templates.

3. In the window that opens, enter the *Name* and *Description.*

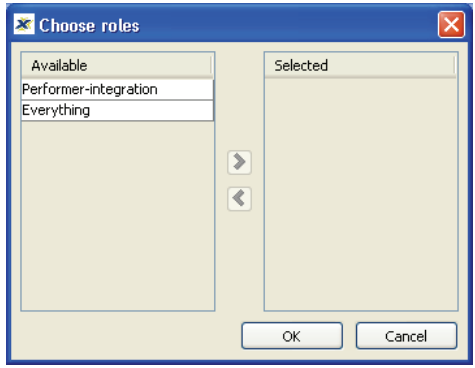


The window to add a new Operator template.

4. Click on the *Add role* to set the role (user rights) for the current operator template.
   (If you have the optional feature *Domains* installed you also have the possibility to define different roles for each domain.)

   If you add a role on the globe icon, the user rights apply for all domains. If you add a role on a house icon the user rights apply only for this domain.

(Using the button "Create a new template from this" you copy the active operator template with a new name in a new window. This is useful if you want to create many similar templates.)



The Choose roles window

5. Add desired role by highlighting it and click on the right arrow. Finish by clicking *OK*.

Roles

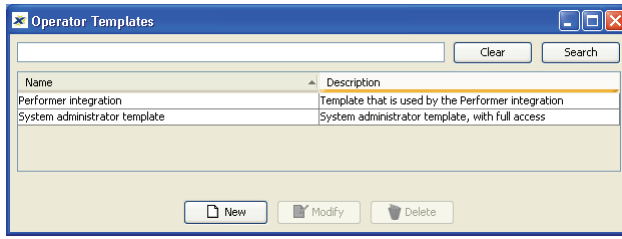
Using the *Roles* menu option (in the *System* menu), a user with the correct user rights can administrate roles.

The roles function lets you define the user rights to be applied to a certain role. A role works like a template for the user rights for new operators in the system. In other words, when creating operator templates, the user rights is decided by adding a certain role.

Add role

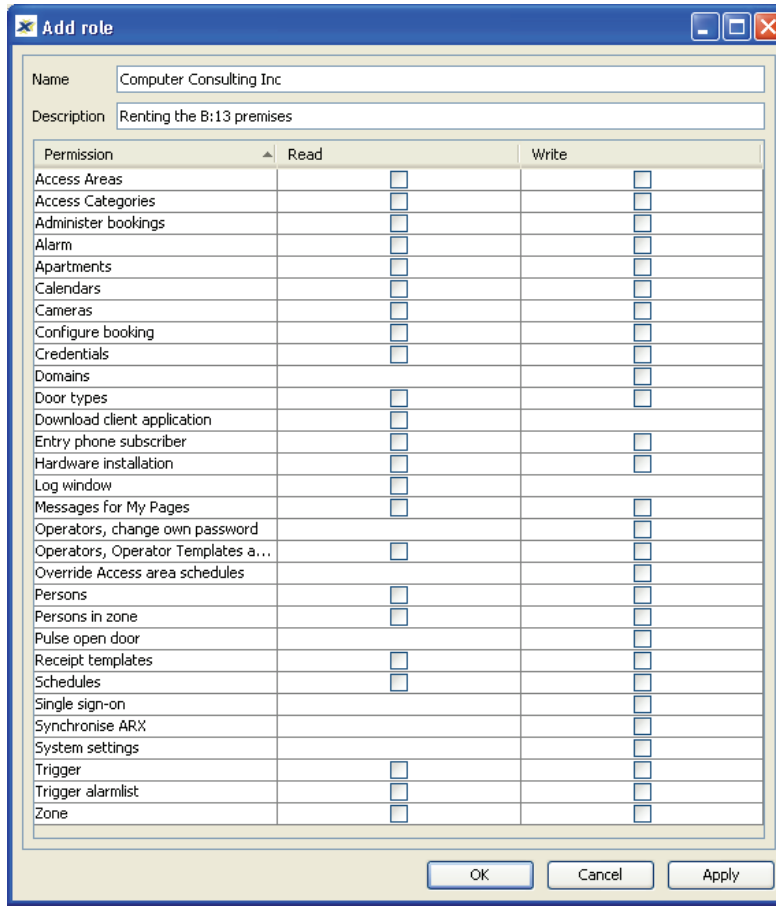
To add a new role, do the following:

1. Select the *System* menu in the main window and choose the *Role* option.



The roles window.

2. In the *Roles* window, click *New*.



The Add role window with a list of all user rights (Requires all optional features)

3. Write *Name* and *Description* and check the desired user rights to be added to the new role. Finish by clicking *OK*.

Explanation of roles

Important: Some of the user rights require other user rights to be set in a certain way. Refer to the table below to see the dependencies:

Rights	Explanation	Also demands	Read	Write
Administrate bookings	Gives the right to see and/or create, change or delete bookings for people.	Calendar	x	
		Basic configuration of bookings.	x	x
		Person register	x	
		Access categories	x	
		Apartments	x	
		Schedules	x	
Access categories	Gives the right to see and/or create, change and delete access categories.	Person register	x	
Domains	Gives the right to see and/or create, change and delete domains.			
Door types	Gives the right to see and/or create, change and delete door types.	Access Areas	x	
		Schedules	x	
Booking: Basic configuration	Gives the right to see and/or create, change and delete posts for everything that has to do with the configuration of the booking function. (Resource tree, time slot templates etc).	Calendars	x	
		Hardware installation	x	
		Access categories	x	
Hardware installation	Gives the right to see and/or create, change and delete hardware in the installation tree.			
Calendars	Gives the right to see and/or create, change and delete calendars.			
Cards	Gives the right to see and/or create, change and delete cards.	Person register	x	x
Card receipts	Gives the right to see and/or create, change and delete Card receipts.			
Show logs	Gives the right to see the log function in ARX.	Operator, Operator's templates and Roles	x	

Download client application	Gives the operator the possibility to download the client application from the web interface.	Administrate bookings	x	
Alarm	Gives the right to see and/or create, change and delete hardware in the alarm tree.	Hardware installation	x	x
Apartments	Gives the right to see and/or create, change and delete apartments.	Person register	x	x
		Access categories	x	x
		Booking: Basic configuration	x	x
		Cards	x	x
		Schedules	x	
Messages for My pages	Gives the right to see and/or create, change and delete messages for My pages.			
Operator, change own password	Gives the right to change own password.			
Operator, Operator's templates and Roles	Gives the right to see or administrate operator, operator's templates and roles.			
Access areas	Gives the right to see and/or create, change and delete posts in the access area tree. * Necessary if adding doors.	Access categories	x	
		Hardware installation	x	x*
		Schedules	x	
Person register	Gives the right to see and/or create, change and delete users.	Cards	x	
		Access categories	x	
Entry phone subscribers	Gives the right to see and/or create, change and delete entry phone subscribers.	Hardware installation	x	
Pulse opening of door	Gives the right to the command to pulse open a door from the installation tree.	Access areas	x	
		Hardware installation	x	
Schedules	Gives the right to see and/or create, change and delete schedules.			
Single sign-on	Gives the right to show/hide information about login, in the ARX web interface. Only valid if part of a web solution, for example extranet.	System settings		x

Synchronise Axio	Contact Assa for more information.			
Trigger	Gives the right to read/modify trigger settings.			
System settings	Gives the right to change the system settings for ARX.			
Exception for the Access areas	Gives the right to add exceptions for the schedule that controls the access categories and functions for a door in the access areas.	Schedules	x	
		Access category	x	
		Access areas	x	
		Calendar	x	
Show logs	Gives the right to see the log function in ARX.			
Show persons in zone	Gives the right to see and reset persons in a zone. *) Is required for resetting people in zones.	Person register	x	
		Zone	x	x
		Access category	x	
Zone	Gives the right to see and/or create, change and delete zones.			

Connect Card Reader to ARX Client (PCI)

About card reader

To make the administration of cards, card numbers and PIN codes easier, it is possible in ARX Client software to connect a PCI reader. This reader can then be used to attach cards to a users, add new cards to card lists or change the PIN code settings for cards in the system.

The menu option *PCI Settings* is shown in the *System* menu. With the options available through this option you can configure the settings for the PCI reader.

This section goes through step by step how you:

- Connect a PCI-reader
- Change the settings for a PCI-reader
- Examples from The Company Example

Connect PCI-reader

To be able to use a PCI-card reader you have to connect it to a COM port or usb-port on the client and connect the power cord. Restart the ARX Client software and configure the settings for the card reader in the system menu – PCI-settings.

When the card reader is connected, an additional icon is displayed in the toolbar in the main window. This icon indicates the status of the connected PCI reader.

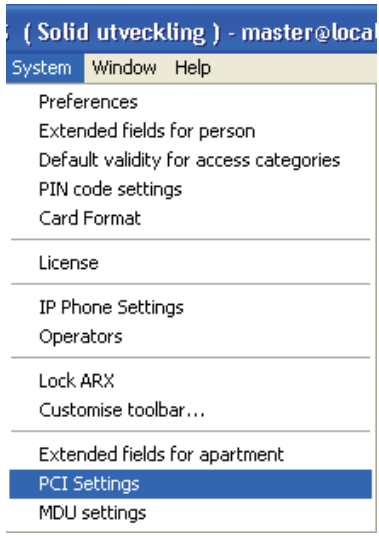
The main window toolbar, with PCI reader icon (blocked)

By clicking on the *PCI reader* button in the main window toolbar it is possible to toggle between *Active* and *Blocked* PCI reader.

The icons for Active (green) and Blocked (red) PCI reader

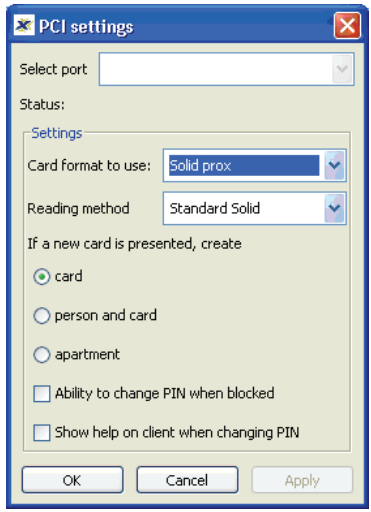
PCI reader settings

If you chose the *PCI* option in the *System* menu a window for PCI reader settings opens.



Menu option PCI Settings

In the upper part of this window the COM port that the reader is connected to, is chosen and also the status of the reader. (If no PCI reader is connected to the client, the status message *Not connected* is shown.)



Window for PCI settings

In the field *Settings* it is possible to select options for the following settings:

- *Card format to use*, with this the drop-down menu you select which card format the reader will use.
  Note! Format chosen must comply with how the cards you want to read are programmed.

- *Reading method*, the method for how data is acquired from the card is selected with this drop-down menu.
  Solid standard
  This input method should normally be used.
  5-5
  Alternative input method. Try this alternative if the ARX Client software does not register the card number correctly.
  Straight input
  Alternative input method. Try this alternative if the ARX Client software does not register the card number correctly.

- If a card is presented, what should then be created? The alternatives are *Card* or *Person and card* (or *Apartment* if the apartment module is installed).

- *Ability to change PIN when blocked* means that the reader is blocked for data gathering, but it can be used for PIN code change for cards.
- The checkbox *Show help on client when changing PIN* will enable help instructions on the client computers screen, as support for operators who are instructing other users.

The PIN code is changed by: press key A – swipe card – enter current PIN code – enter new PIN code – enter new PIN code again (as confirmation). The LED on the reader then flashes green three times if the code change was successful.

NOTE! For cards that have no PIN code, a new code can be added by: press key A – swipe card – enter desired PIN code – enter new PIN code again (as confirmation). The LED on the reader then flashes green three times to confirm a successful registration.

Examples

Adding code

You only have to start the ARX Client software for the following procedure to work.

1. Press A
2. Swipe Card

The reader lights up the symbols on the buttons.

3. Enter desired code
   (Or give the card reader to the card owner so that they can select a code)

The reader confirms by a fast flashing green light.

4. Repeat the same code again to confirm

The reader flashes green 3 times if everything is ok.

Change PIN code

You only have to start the ARX Client software for the following procedure to work.

1. Press A
2. Swipe card

The reader lights up the symbols on the buttons.

3. Enter the present four number code
   (Or give the card reader to the card owner so that they can enter a code)

The reader confirms by a fast flashing green light.

4. Enter a new code
5. Repeat the same code again to confirm

The reader flashes green 3 times if everything is ok.

Apartments (option)

About Apartments

The apartment module is used for handling information and access permissions for apartments in the installation.

In ARX, you can create a number of apartments and then decide which access permissions each apartment shall have and which bookable objects the apartment residents shall be able to book.

Linked to each apartment are two access categories (security levels): *Normal* and *Restricted*. These two access categories can be used to give residents of an apartment different access permissions.

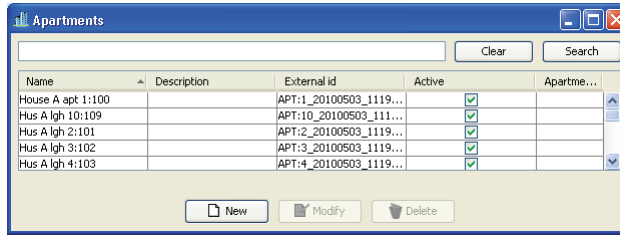
Please note that the cards linked to an apartment are linked to the actual apartment – not to a person.

The apartment module is only accessible in the ARX Client software if you have a valid licence which covers these features.

Add an apartment

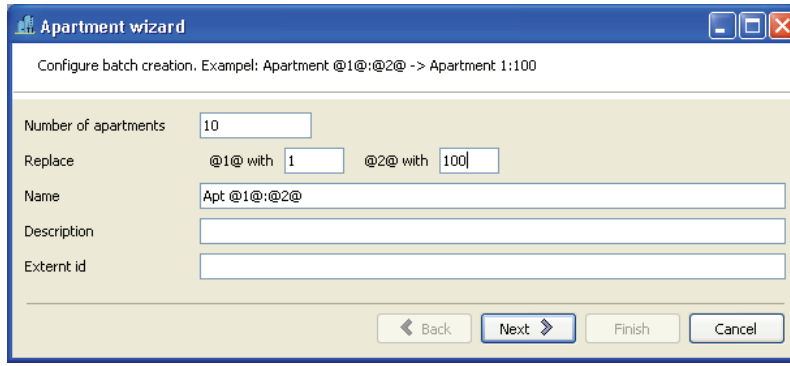
To add an apartment, do the following:

1. Click the *Apartment* button on the toolbar of the main window.
2. Click the *New* button at the bottom of the *Apartment* window that now opens.



Window with list of apartments registered in the system.

3. Now the *Apartment wizard* that will assist you in adding new apartments. The first step is to enter the number of apartments to add and set the naming conventions for these apartments.

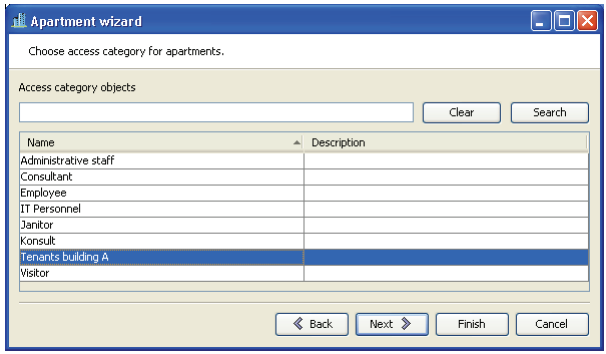


Apartment Wizard - configure batch creation (step 1)

4. Use the two built-in macros (“@1@” and “@2@”) to create batch rules for how the new apartments shall be labeled. The new apartments are then automatically

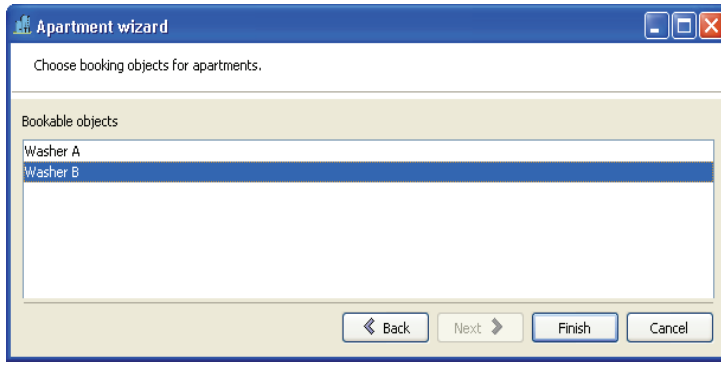
according to the created rules. For example apartment 1:101, apartment 1:102 and so on.
External id: Is automatically added, and is used by other systems.
Then click the button *Next>*.

5. Next, choose access for the apartment(s) in the next wizard window. Select access categories in the list and click *Next>* to proceed.



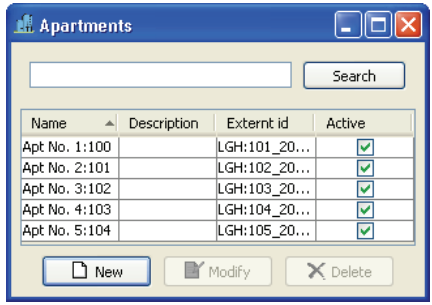
Apartment Wizard - choose access (step 2)

6. In the last window of the apartment wizard, choose which bookable objects the new apartments shall have access to. Then click *Finish>* to add the new apartments with settings to the ARX Client software structure.



Apartment Wizard - choose bookable objects (step 3)

7. Now the wizard closes and the new apartments are added to the list in the *Apartment* window. New apartments are by default set to be *Active*.



The Apartments window with new apartments added

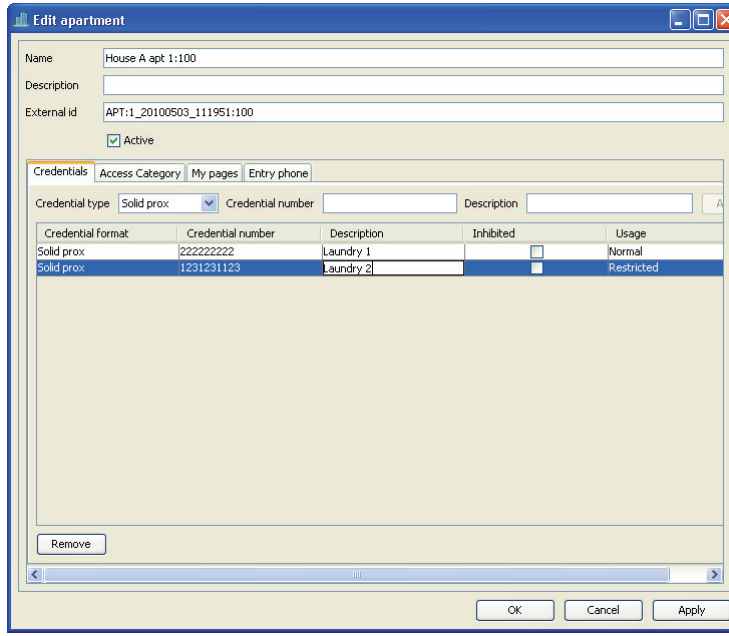
Modify apartment settings

To change or modify settings for an apartment, do the following:

1. Select the *Apartments* menu option in the *Tools* menu.
2. In the *Apartment* window highlight the apartment in the list that should be modified and click *Modify*.

3. In the upper part of the *Edit Apartment* window you can change the information regarding *Name*, *Description*, *External Id* and if the apartment shall be *Active* or not. If you choose to un-check the *Active* checkbox, all cards linked to the apartment will cease to work.

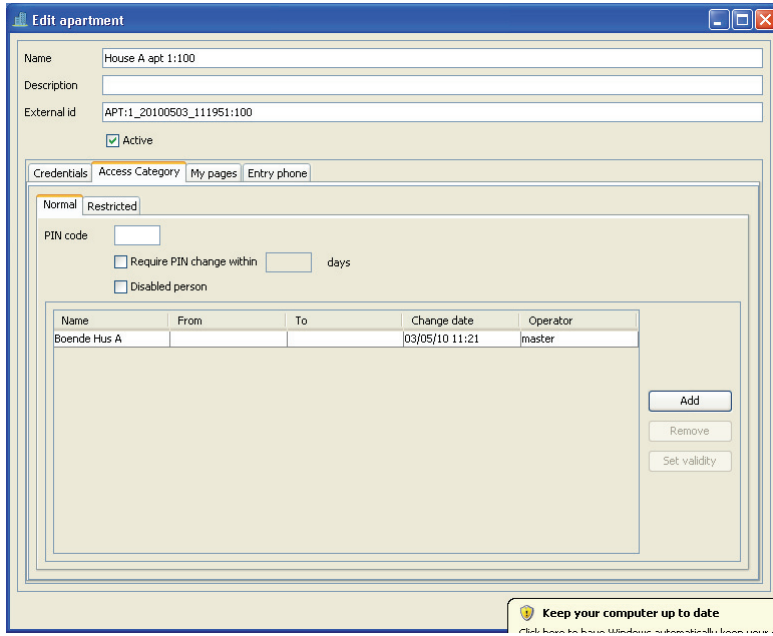
4. Under the *Card* tab in the *Edit Apartment* window it is possible to add and remove cards for the apartment. (Card type is only changeable when you add new cards.) Enter the card number and click *Add*. (The card is automatically connected for normal usage.)



Edit apartment window, Cards tab

5. The card can now be changed to restricted use if you want. Do this by clicking the text in the *Usage* column and choose restricted.

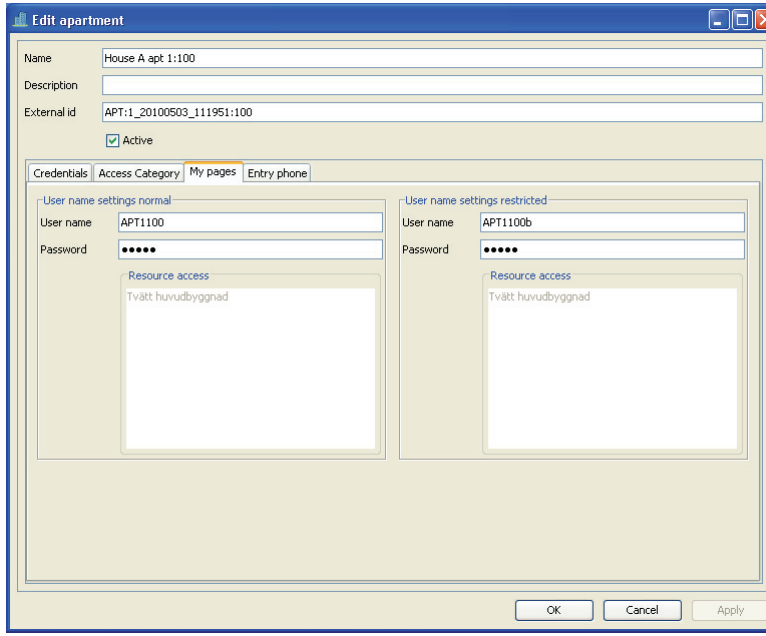
6. Under the *Access Category* tab in the *Edit Apartment* window you can edit the two access categories (*Normal* and *Restricted*) linked to each apartment.



Edit apartment window, Access Category tab

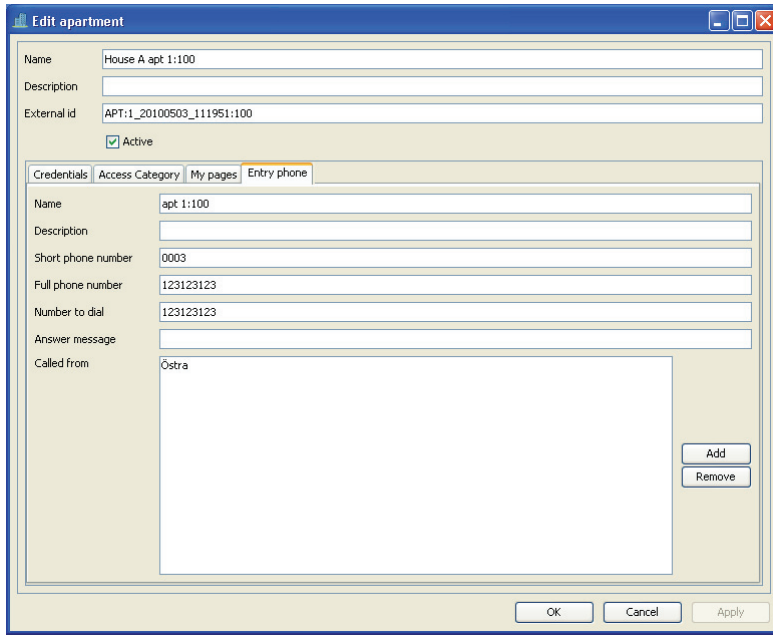
Explanation: The cards added for normal usage inherit the access set in the Normal tab and the cards added for restricted usage inherits the access set in the restricted tab.

7. Under the *My pages* tab in the *Edit apartment* window you can user credentials for *Normal* and *Restriced* access to the booking function on *My pages* .



Edit apartment window, My pages tab

8. Under the *Entry phone* tab you can allot one or several entry phones to each appartment.



Edit apartment window, Entry phone settings tab

For each entry you can set the following options:

- *Name* - The name of the holder of the apartment, office, etc. This is visible in the entry phone display, maximum 16 characters.
- *Description* - A brief description.
- *Short phone number* - The number that will work as a speed dial number from the entry phones. (By default the first available number is set for a new entry.)
- *Full phone number* - The number that will be linked to the holder of the apartment or office. If you dial this number

from an entry phone in the installation, the phone will ring at the apartment/office.

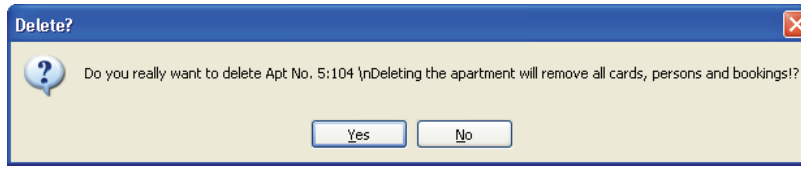
- *Number to dial* - The holders complete phone number including any prefix, area code, etc.
- *Answer message* - The text message (maximum 16 characters) that will be displayed in the entry phone when a connection is established. For example a description of how to find the apartment.
- *Called from* – Here you can add one or several entry phones available in the system.

9. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

Remove apartment

To remove an apartment, do the following:

1. Select the *Apartments* menu option in the *Tools* menu.
2. In the *Apartment* window highlight the apartment in the list that should be modified and click *Delete*.
3. If you are sure that you want to delete this apartment, click *Yes* in the query dialog that now appears. **Note!** When an apartment is removed, all cards, access settings and bookings linked to the apartment will be deleted.


Delete?
Do you really want to delete Apt No. 5:104 \nDeleting the apartment will remove all cards, persons and bookings!?
Yes
No

Query dialog Delete operator

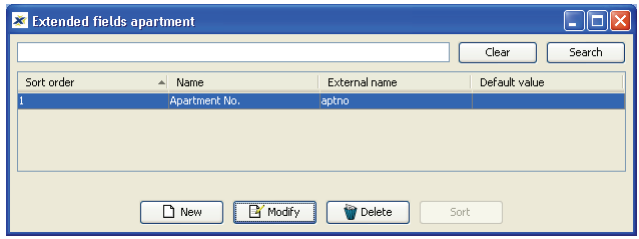
Extended field for apartment (option)

If the apartment module is installed menu option *Extended fields for apartment* is shown in the *System* menu. With this menu option you can add additional information fields for apartments in the installation.

Add extra field for apartment

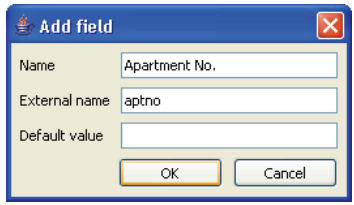
To add a new information field, do the following:

1. In the window *Extended fields for apartment*, click the button *New*.



Window Extended fields for apartment

2. In the dialog window that opens, enter the *Name* that you want the field to have in ARX Client software, and enter which *External Name* that this field will have when you export or import data. *Default value* (not mandatory) is the value that will be automatically prompted for this field on all apartments.



Window to add an extra text field

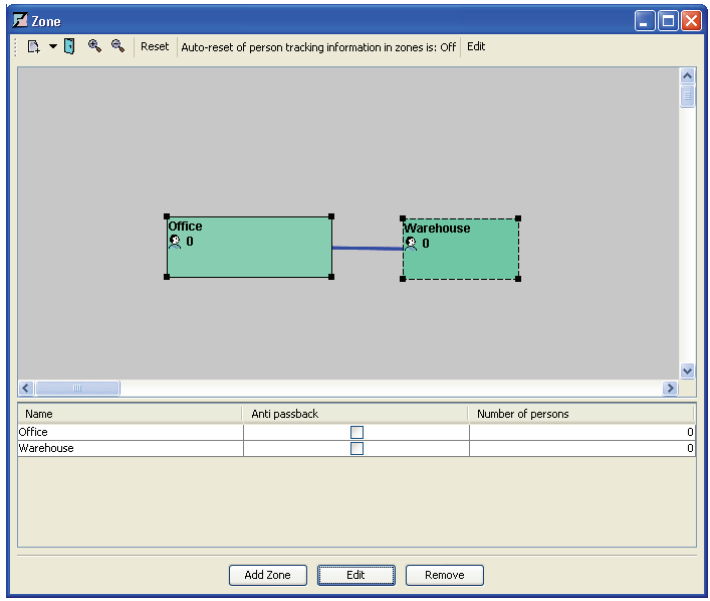
3. In the menu dialog, click *OK* if you want to save the information and close the window. Click *Cancel* if you want to close without saving the information.

4. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

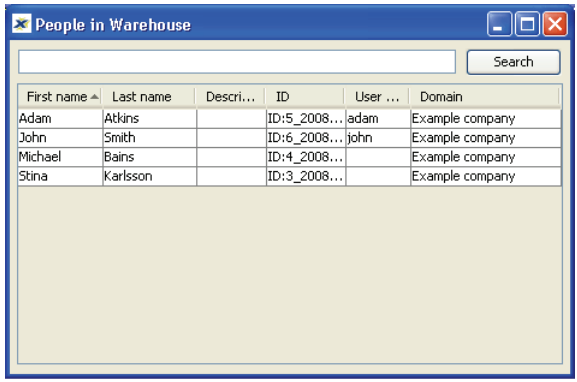
Obtain position of users during fire alarm

The fire alarm at the storage room is ringing and you want to quickly find out which persons are in that area.

1. Select *Zone* in the *Tools*-menu.
2. The Zone map is shown, double-click on zone – Storage.



Window Zone



Window: Person in zone

Here you can see that there are 3 persons in this zone.

Booking (option)

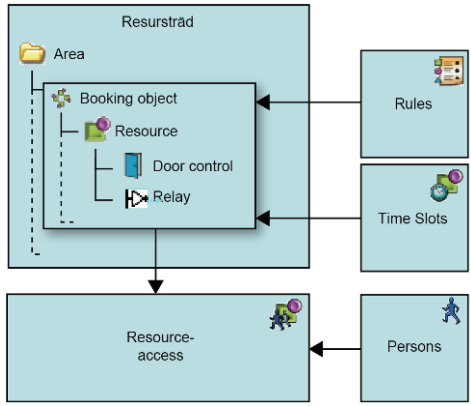
About Booking

With the *Booking* module is it possible to create a logical structure of bookable resources available in the installation. The two main components are the *Booking* module and a number of actual booking panels.

The booking panels are connected to controllers and are added to the installation via the *Installation tree*. This makes it possible to manoeuvre connected units from the booking panels through installed DACs and relays. Regular doors and doors controlled by the booking functions can be connected to the same controller.

The *Booking* module is only accessible in the ARX Client software if there is a valid licence that covers these features present.

The picture shows how the different parts of the booking function are connected:

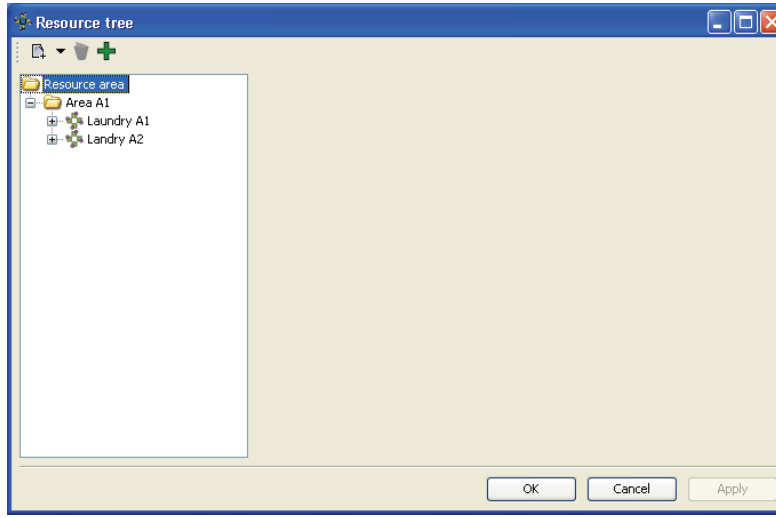


- **Resource tree,** contains areas, booking objects and resources that are connected too and controls doors and relays.
- **Resource access,** decides which persons or apartments have access to which booking objects. It is also possible to connect a schedule to the resource access.
- **Time slot templates,** controls the length of the bookable time slot length for every booking object.
- **Rule templates,** controls the maximum amount of bookings for every bookable object.
- **Booking object,** can be, for example, a conference room or a laundry room.

Additionally there is a booking list where the administrator can see the bookings made and which ones are active.

Resources tree

In the tree structure to the left of the *Resource tree* window, the different resource areas, booking objects and resources are visible. On the right side of the window the different booking settings for each object in the tree structure are shown.



The Resources tree window with the top level (Resource area) highlighted

Resource area

The top level in the tree structure is the *Resource area* and below that level is it possible to add *Areas*.

In the message display shown you can change the standard text message and add information. To do this, click on the display area where you want to add the text and enter the characters with your keyboard.

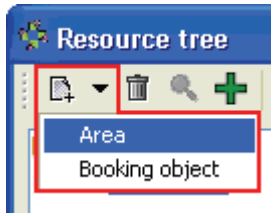
NOTE! The message text for a certain area is only shown on the booking panel's display if there is more than one area available. That is, if the user have to make a choice.

NOTE! In addition to letters and digits, the panel can only handle following special symbols: ?,.;:)(/\<>&%¤#!"=@-.

Area

To add an area to the *Resources tree*, do the following:

1. Highlight the level in the resource tree that the area shall be located under.
2. Select the option *Add* in the menu bar, and click *Area*.

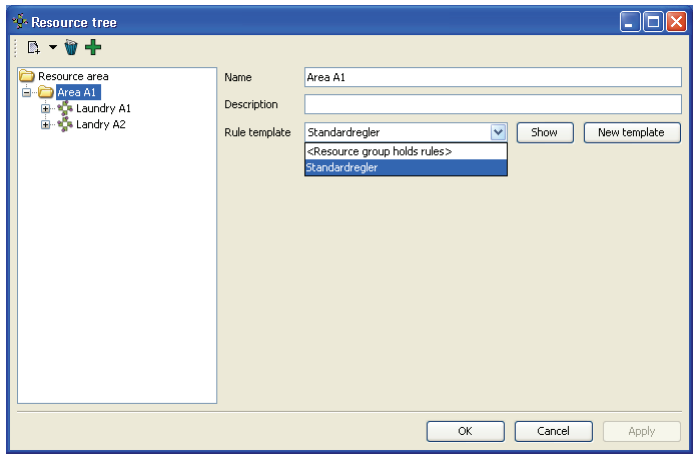


Drop down menu option to add an area

3. The symbol for the new area is now added to the resources tree on the left side.
4. Add a *Name* of the area and add a short description.

Settings

Under the *Settings* tab, enter *Name* and a brief *Description* for the area.



The Resources tree window with a area creaated

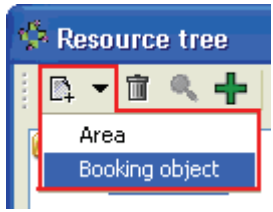
The the *Rule template* you can select a rule that will apply for the whole area or allow that different rule templates apply for each booking object within the area by selecting *<Resource group holds rules>*.

Booking object

The level below an area is *Booking object*. A booking object is a bookable unit, such as for instance a laundry room or a conference room.

To add a booking object to the *Resources tree*, do the following:

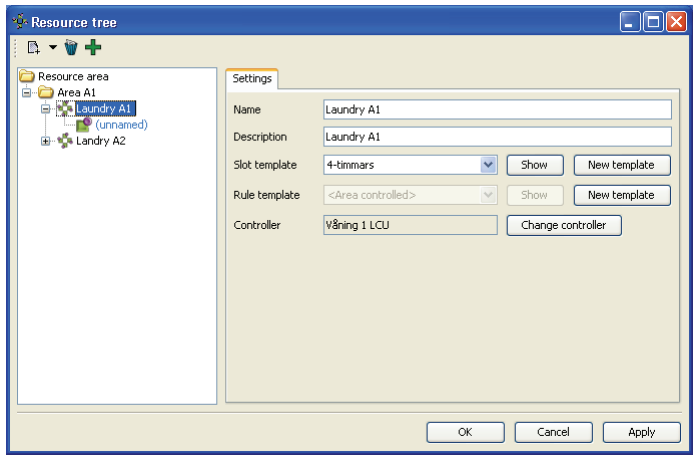
1. Highlight the level in the resource tree that the booking object shall be located under.
2. Select the option *Add* in the menu bar, and click *Booking object*.



Drop down menu option to add a booking object

3. The symbol for the new object is now added to the resources tree on the left side. A resource is also automatically created.

4. Enter *Name* and a brief *Description* for the booking object.



The Resources tree window with a booking object highlighted

5. Also select a slot template and Rule template.Click *New template* for tailor made rules for this booking object.

6. Finally select which controller that is connected to this booking object.

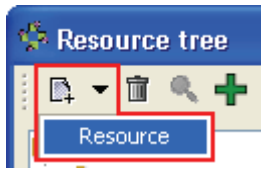
Resource

The next level in the resources tree, below booking objects, is *Resources*. A resource can for instance be a washing machine in a laundry room (the booking object) or a video projector linked to a conference room (the booking object).

A resource can also be a seminar or a training session, that several users can book at the same time (several concurrent bookings). The overlying booking object is here the seminar room or the training premises.

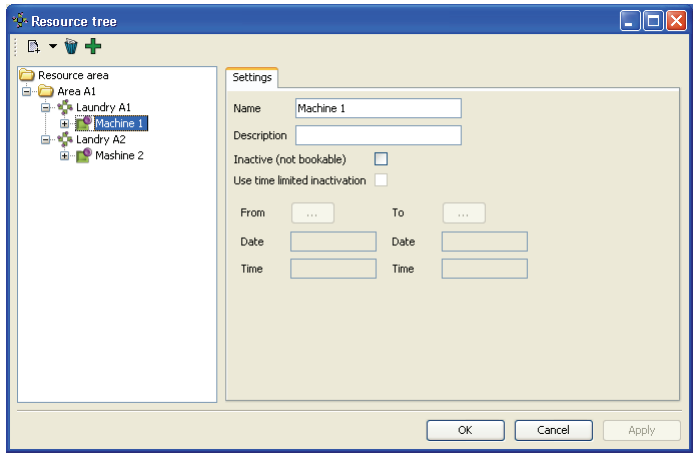
To add a booking object to the *Resources tree*, do the following:

1. Highlight the level in the resource tree that the resource shall be located under.
2. Select the option *Add* in the menu bar, and click *Resource*.



Drop down menu option to add a resource

3. The symbol for the new resource is now added to the resources tree on the left side.
4. Enter *Name* and a brief *Description* for the resource.



The Resources tree window with a resource highlighted

The options under the *Settings* tab for the selected resource are:

- *Resource can not be activated from booking panel*
- *Inactive (Not bookable)*

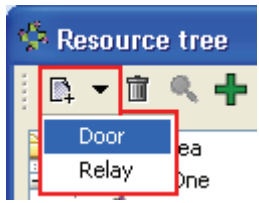
If the check box *Inactive (Not bookable)* is checked you can create a limited time period when the resource not bookable (inactive).

Door

It is possible to link doors to a resource in order to grant people access to the resources.

To add a door to the *Resources tree*, do the following:

1. Highlight the resource that the door shall be located under.
2. Select the option *Add* in the menu bar, and click *Door*.



Drop down menu option to add a door

3. In the window *Add door* that now opens, select one of the available doors (DACs) from the list. Click *OK*.

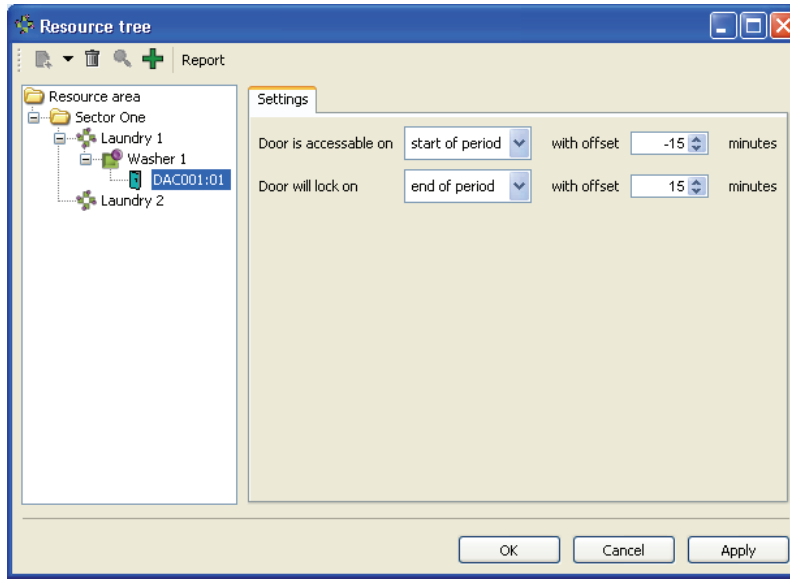
For each door, under the *Settings* tab, you can set when a user shall have access to the resource.

To the field *Door is accessible from* there are two options:

- The time to calculate from. *Start of period*, *End of period* or *First entry*.
- The *Offset* in minutes. If a negative time is entered (i.e. -15 minutes), access is granted through the door 15 minutes before the start of the period (for example).

To the field *Door will lock at* there are two options:

- The time to calculate from. *Start of period*, *End of period* or *First entry*.
- *The Offset* in minutes. If a positive time is entered (i.e. 15 minutes), access is granted through the door 15 minutes after the end of the period (for example).



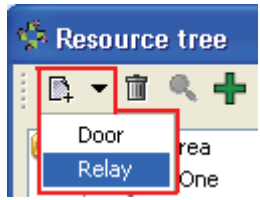
The Resources tree window with a door highlighted

Relay

Relays can be linked to resources and thus make it possible to switch equipment on and off.

To add a relay to the *Resources tree*, do the following:

1. Highlight the resource that the relay shall be located under.
2. Select the option *Add* in the menu bar, and click *Relay*.



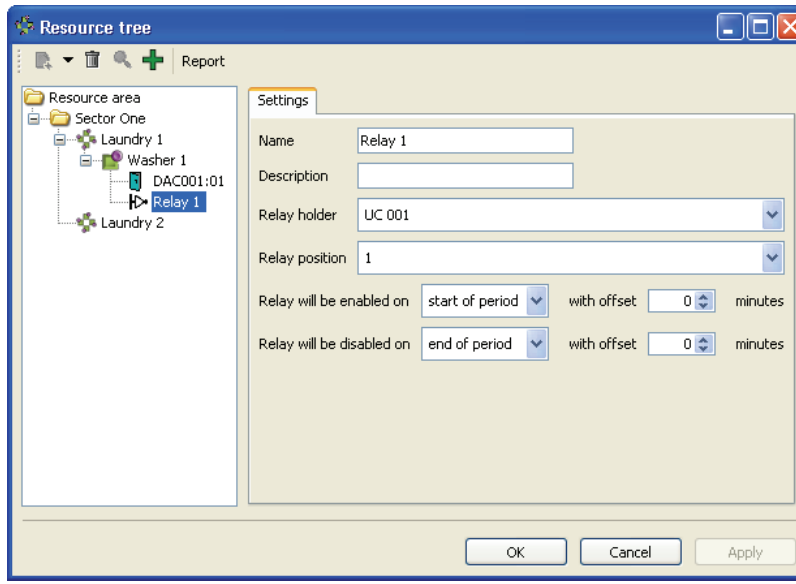
Drop down menu option to add a relay

Under the *Settings* tab, enter *Name* and a brief *Description* for the relay. Also select to which *Relay holder* the relay is connected to, the *Relay position* and when the relay shall be enabled and disabled.

The setting *Relay holder* sets to which controller or DAC the relay is connected and *Relay position* indicates the relays input position on the DAC or controller.

To the rows *Relay will be enabled at* and *Relay will be disabled at* there are two options:

- The time to calculate from. *Start of period*, *End of period* or *First entry*.
- The *Offset* in minutes.



The Resources tree window with a relay highlighted

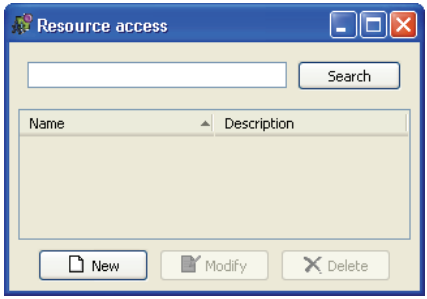
Resource access

With the function Resource access it is possible to link together single users or groups of users to bookable resources.

Create a new resource access

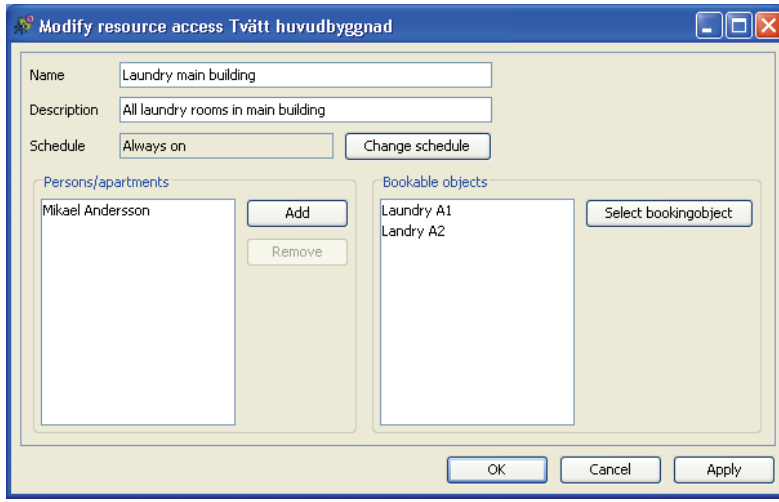
To create a new resource access, do the following:

1. Click on the *Resource access* button in the main window.
2. In the *Resource access* window, click on the *New* button.



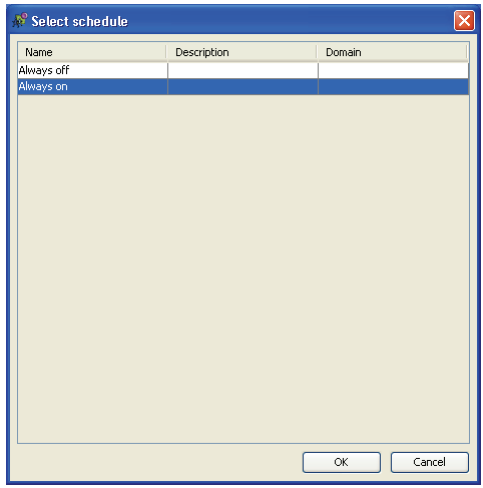
Window Resource access

3. Enter *Name* and add a brief *Description* of the resource access.



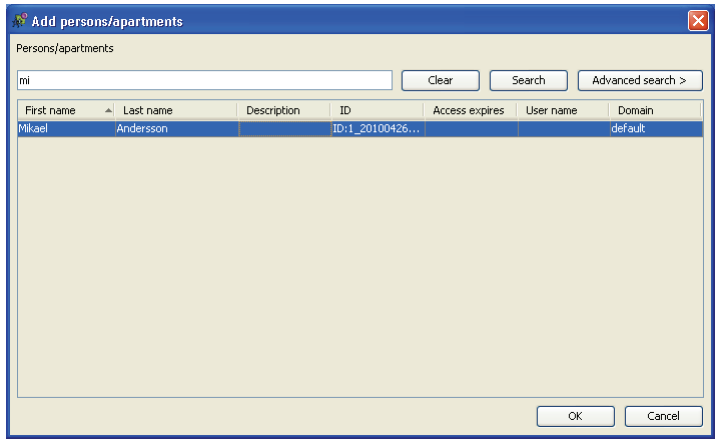
Resource access window

4. Click on *Change schedule* to attach a schedule to the resource access.
   With this schedule you can restrict the bookable periods for individuals that are in the access categories linked to the resource access.
   NOTE! If you want to create a special schedule for this feature, that can be done by creating a new Other schedule. (For more information on how to work with schedules, see "Schedules" on page 110).



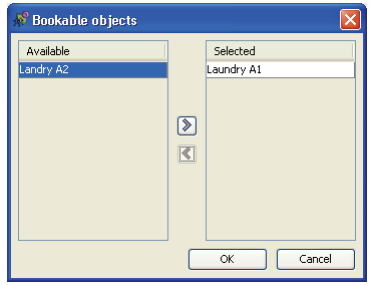
Resource access - schedule

5. In the *Persons/apartments* field add a person or apartment.



Window to add persons or/and apartments

6. In the *Bookable objects field* add the booking object(s) that apply for the resource access.



Window to add bookable objects

7. Select the available objects, click the arrow. Finish by clicking *OK*.
8. Finally, click *OK* to add the new resource access.

Time slot templates

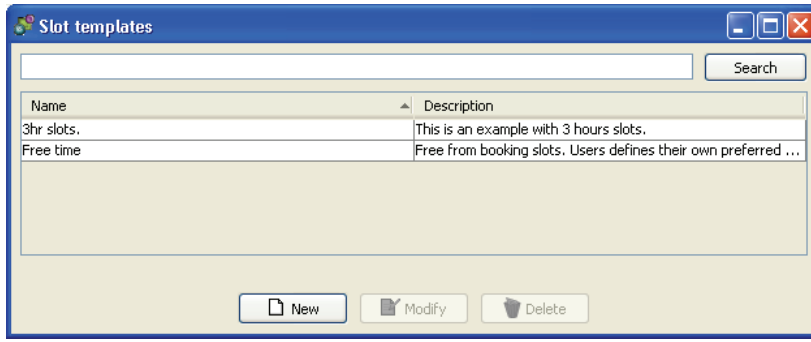
With the function *Time slot templates t* it is possible to create time slot templates for the booking feature. The rules included in the templates will control the time slots for the bookable resources.

Default for time slots are *Free time*, which means that the user defines time period for the booking himself.

Create new time slot template

To create a new time slot template, do the following:

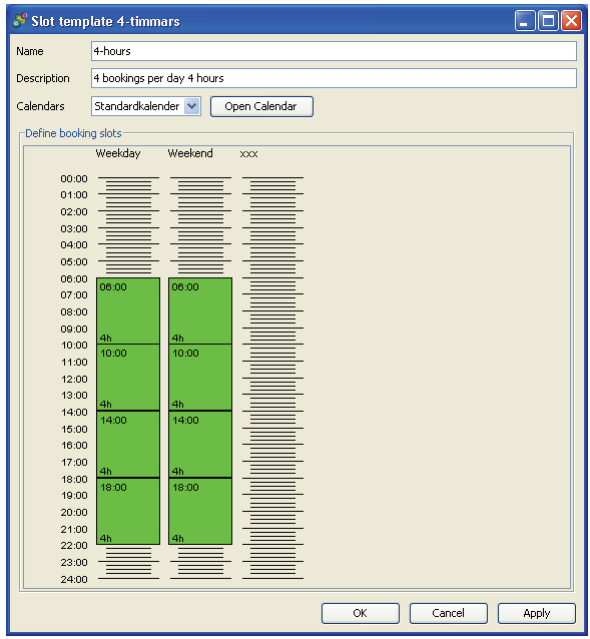
1. Select the *Time slot* menu option in the *Tools* menu.
2. In the *Slot templates* window, click on the *New* button.



Slot templates window

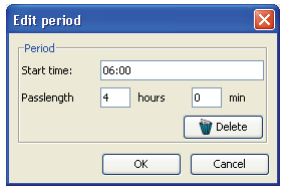
3. Now enter a *Name* and add a brief *Description* for the slot template. Then select a calendar for the template with the *Select calendar* button.

4. In order to create new booking time slots, click and drag to create a time slot.



Window Slot template

5. Repeat until all time slots are added. Click and drag to mote the time slots. To edit or delete a time slot double click on the time slot and set the *Start time* and the *Passlength*.



Slot template, edit window

6. Finish by clicking *OK* or *Apply*.

Tip: Rules can extend over night, which allows multi-day time slots. When the user reserves multi-day pass, other overlapping time slots becomes unavailable for reservation.

Rules

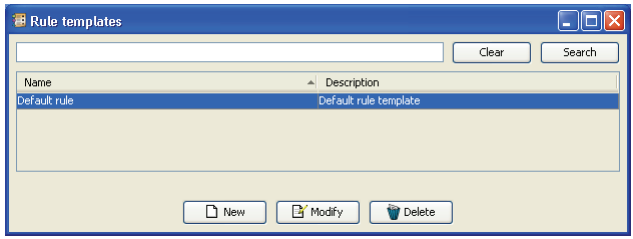
With the function *Rules* you can to create rule templates. These rule templates makes it possible to pre-define how rules linked to bookings in the system are designed. For example, you can create different sets of standard rules for different parts of the system.

By default there is one pre-defined rule template in ARX called *Default rule*. The default template can be modified, or you can create new rule templates.

Create new rule template

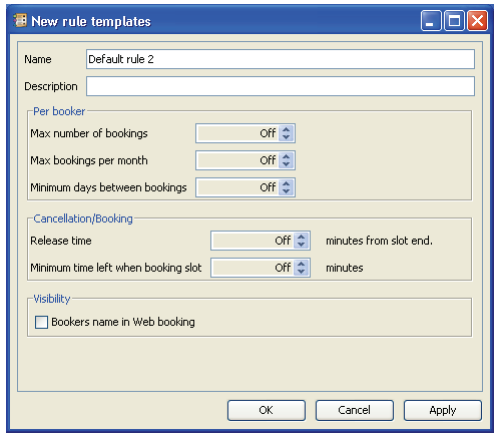
To create a new rule template, do the following:

1. Select the *Rules* menu option in the *Tools* menu.
2. In the *Rules* window, click on the *New* button.



Window Rules

3. Now enter a *Name* and add a brief *Description* for the slot template.



Window Rule template

4. Now set the different options for the rule template (see the alternatives below).

5. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

The configuration options for the selected *Rule template* are:

- *Max number of coming bookings* - the maximum number of active bookings a user is allowed to have.
- *Max bookings per month* - the maximum number of bookings a user is allowed to have in the same month. (Restarts the first of each month.)
- *Minimum days between bookings* - the minimum number of days a user must have between two bookings.
- *Release time* - the time period (in minutes) a user is allowed to activate a booking. After this period the booked resource is released.
- *Minimum time left to book slot* - The minimum number of minutes left of a time slot when a resource is bookable.

- *Bookers name in web booking*- The name of the person making a booking is visible for other user in My pages.

Modify rule template

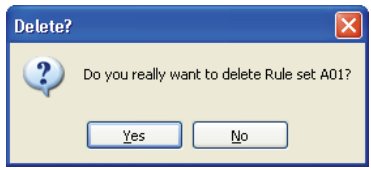
To change the settings for a rule template, do the following:

1. In the window *Rules*, highlight the template that you want to change and click *Modify*.
2. In the window that now opens you can modify or change the settings for the template.
3. Click *OK* if you want to save the information and close the window. To close the window without saving the input, click the *Cancel* button. Click *Apply* if you want to save the information and at the same time keep the window open.

Remove rule template

To remove a rule template, do the following:

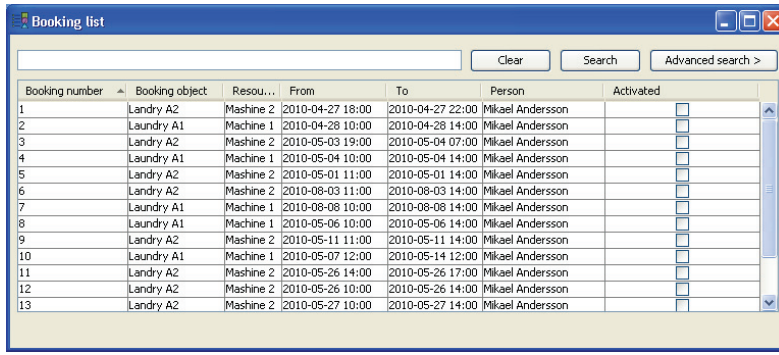
1. In the window *Rules*, highlight the template that you want to remove and click *Delete*.
2. If you are sure that you want to remove this time slot template, click *Yes* in the query dialog that now appears.



Query dialog Delete resource access

Booking list

The main window gives the administrator an overview of all bookings made.


Booking list
Clear
Search
Advanced search >
Booking number
Booking object
Resou...
From
To
Person
Activated
1 Landry A2 Mashine 2 2010-04-27 18:00 2010-04-27 22:00 Mikael Andersson
2 Laundry A1 Machine 1 2010-04-28 10:00 2010-04-28 14:00 Mikael Andersson
3 Landry A2 Mashine 2 2010-05-03 19:00 2010-05-04 07:00 Mikael Andersson
4 Laundry A1 Machine 1 2010-05-04 10:00 2010-05-04 14:00 Mikael Andersson
5 Landry A2 Mashine 2 2010-05-01 11:00 2010-05-01 14:00 Mikael Andersson
6 Landry A2 Mashine 2 2010-08-03 11:00 2010-08-03 14:00 Mikael Andersson
7 Laundry A1 Machine 1 2010-08-08 10:00 2010-08-08 14:00 Mikael Andersson
8 Laundry A1 Machine 1 2010-05-06 10:00 2010-05-06 14:00 Mikael Andersson
9 Landry A2 Mashine 2 2010-05-11 11:00 2010-05-11 14:00 Mikael Andersson
10 Laundry A1 Machine 1 2010-05-07 12:00 2010-05-14 12:00 Mikael Andersson
11 Landry A2 Mashine 2 2010-05-26 14:00 2010-05-26 17:00 Mikael Andersson
12 Landry A2 Mashine 2 2010-05-26 10:00 2010-05-26 14:00 Mikael Andersson
13 Landry A2 Mashine 2 2010-05-27 10:00 2010-05-27 14:00 Mikael Andersson

Booking list main window

If the booking list contains of a large number of bookings, use the *Search* or *Advanced search* function.

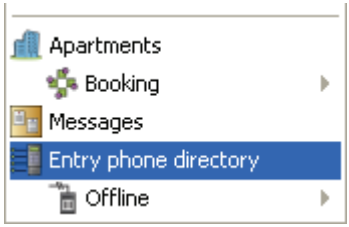
Entry Phone Directory (option)

About Entry Phone Directory

The *Entry phone directory* feature handles all settings and options linked to the entry phone functionality.

To make the optional module *Entry phone* accessible in the ARX Client software, a valid licence for this module must be installed.

The objects listed in the entry phone directory can for example be apartments or a reception desk.



The Entry phone director menu option (Tools menu)

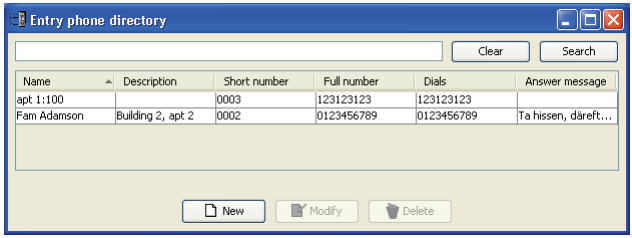
This section goes through step by step how you:

- Add an Entry phone subscription

Create new entry

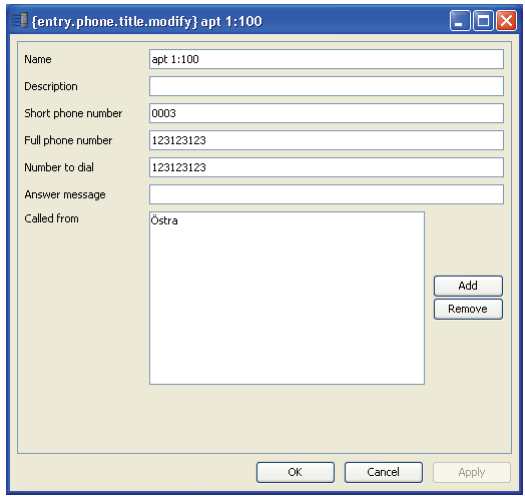
To create a new entry in the entry phone directory, do the following:

1. Select the *Entry phone directory* menu option in the *Tools* menu.



Window Entry phone directory

2. In the *Entry phone directory* window, click on the *New* button.
3. In the *Create entry phone directory* window that now opens all settings options for the new directory entry are displayed.



Window Create Entry phone directory

For each new entry you can set the following options:

- *Name* - The name of the holder of the apartment, office, etc. This is visible in the entry phone display, maximum 16 characters.
- *Description* - A brief description.
- *Short phone number* - The number that will work as a speed dial number from the entry phones. (By default the first available number is set for a new entry.)
- *Full phone number* - The number that will be linked to the holder of the apartment or office. If you dial this number from an entry phone in the installation, the phone will ring at the apartment/office.
- *Number to dial* - The holders complete phone number including any prefix, area code, etc.
- *Answer message* - The text message (maximum 16 characters) that will be displayed in the entry phone when a

connection is established. For example a description of the floor, house number etc.

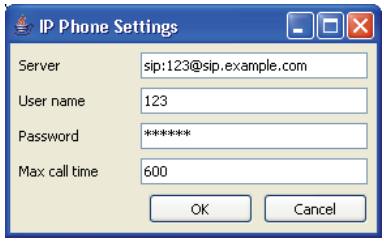
- *Called from* - With this option you set one or several entry phone units to connect to the subscriber.

IP Phone Settings (option)

If the apartment module is installed the menu option *IP Phone Settings* is also shown in the *System* menu. This menu option is linked to the optional feature *Entry Phone* in ARX Client software.

If you select the menu option *IP Phone Settings* a new window opens where you can set:

- *Server*
- *User name*
- *Password*
- *Max call time* (in seconds)



Window IP Phone Settings

Zone (option)

About Zone

If you have a licence that covers the optional feature Zone, you can create and manage zones in your installation.

Zones can for example be used when monitoring where (in a building for example) people are. This can for instance be helpful if an area or a building must be evacuated.

The Zone menu option (Tools menu)

This section goes through step by step how you:

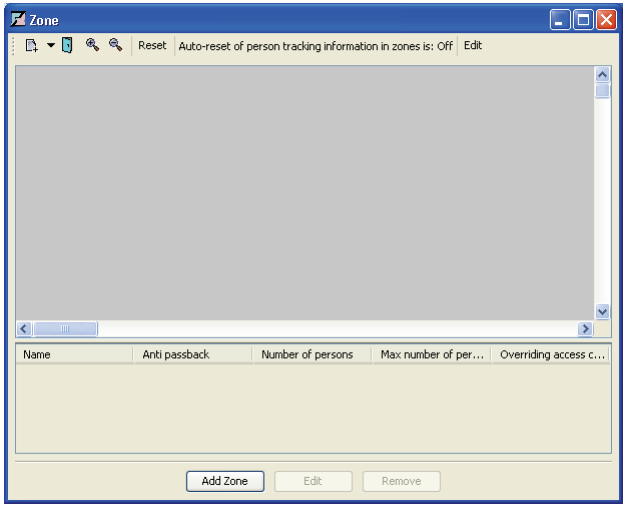
- See how many persons there are in the different zones
- Use anti passback
- Example taken from The Company Example

For more information on additional functions, adding doors or how to create or change zones, see the configuration guide.

Add zone

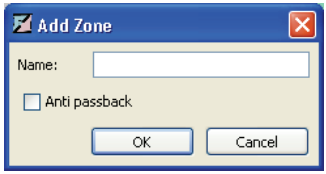
To create a new zone, do the following:

1. Select the *Zone* menu option in the *Tools* menu.



The Zone window

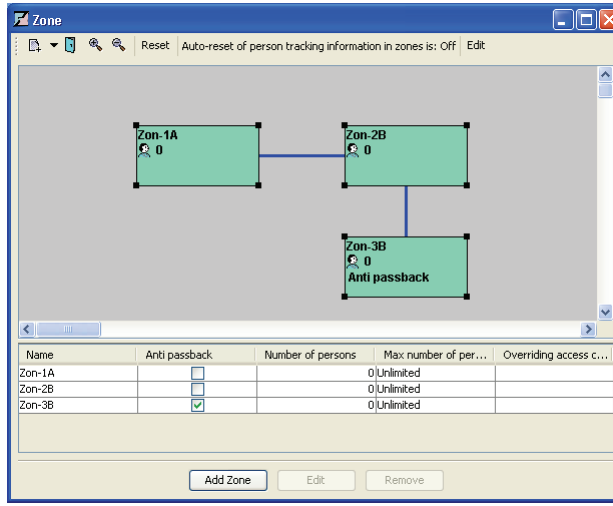
2. In the *Zone* window, click on the *Add zone* button (or right-click in the windows map area and choose *Add zone*.)
3. In the *Add zone* window that now opens enter a *Name* for the new zone.



Dialog window Add zone

4. Now add the doors to the zones, where you set what readers on each door leads in and out from the zone.

The new zone is now added to the zone list in the lower part of the *Zone* window and shown in the graphical zone map.



Window Zone

Zone map

In the main window for the *Zone* function a graphical zone map is shown. This map shows all available zones in the installation.

You can change the layout of the zones in the zone map. This will help you to organize the zones in the zone map to better depict your actual installation and make the zone map easier to work with.

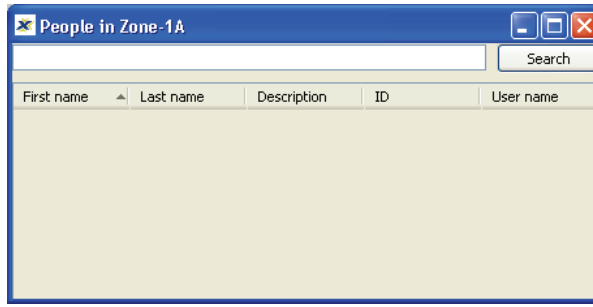
Regroup and move the zones by selecting one zone at a time and drag it to a new location.

It is also possible to change the size of a zone in the zone map. Select and drag a corner handle to resize a zone.

People in zones

Both in the graphical zone map and in the zone list the user can get information about how many users that are in the different zones.

By right-clicking in the zone map (the grey background) you can choose the alternative *Show people in all zones*. This will display a list of all users that are located in any of the zones in the installation.



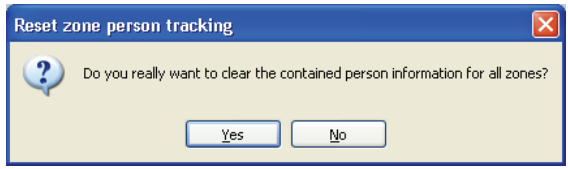
Window People in zone

If you want to see a list only of the users that are present in a certain zone, right-click (or double-click) on this zone in the zone map. This will open a list of the users that are located in this specific zone.

Reset people lists

In order to reset the lists that show which people is present in the different zones, do the following:

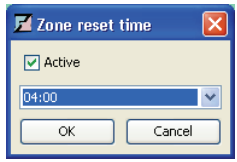
1. In the window *Zone*, click the *Reset* button in the windows menu row.
2. If you are sure that you want to reset the information stored, click *Yes* in the query dialog that appears.



Query dialog Reset zone person tracking

Automatic reset

With this function you can put in a time interval for when the person lists are to be reset. Click on *Change*:



Select a time of day when the user lists shall be reset.

Note! Choose a time when the access system is as empty of persons as possible.

Note! Be especially careful to check that there are no people in an anti-passback zone. After reset, these persons can not exit this zone.

Anti pass-back in zone (option)

Anti pass-back in zone is a feature that makes it possible to deny a person entry through a door twice (that is, not allowing a person to swipe his/her card twice in a door reader).

For a zone you can either choose anti pass-back as an option (check-box) when you creates an new zone or by editing an existing zone.

To edit a existing zone, do the following:

1. Select a zone and click the *Edit* button in the lower part of the window (or right-click on a zone in the map area and choose *Edit*).
2. Click *OK* if you want to save the change and close the window. Click *Cancel* if you want to close the window and not save the changes.

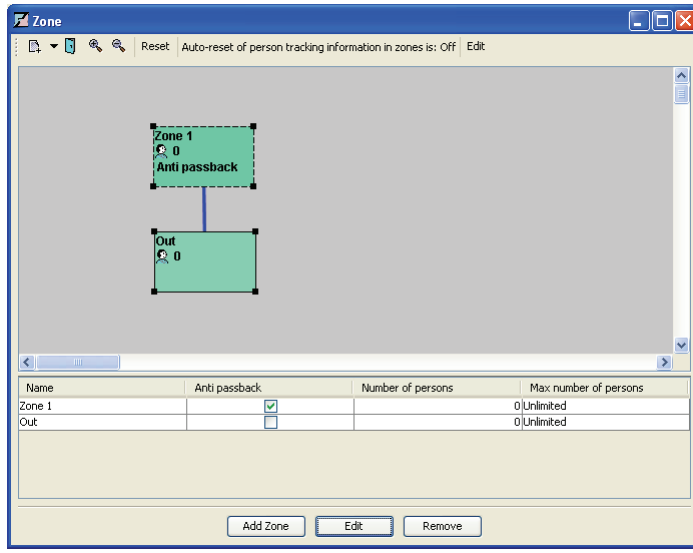
Note! The anti pass-back function applies to the zone a person enters. That is, the zone a person walks in to.

The Anti pass-back function is optional and only accessible in the ARX Client software if there is a valid licence that covers anti pass-back present.

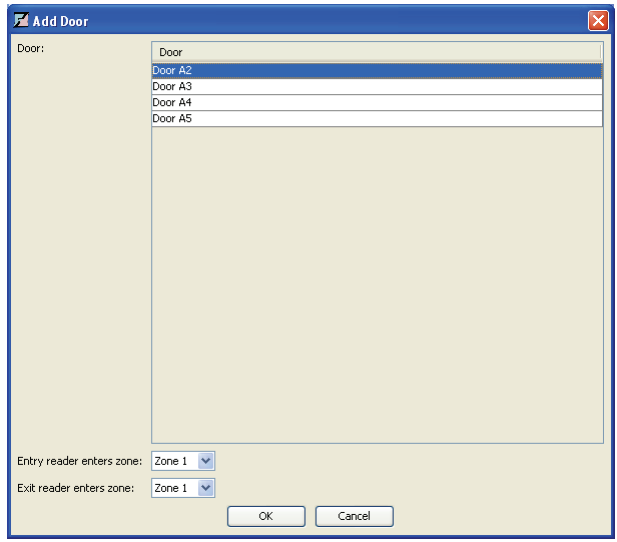
Activate door block in the anti pass-back zone

When anti pass-back is activated for a zone it is possible to block all other doors in the zone for passage for users that have been let into the zone by other users. This is useful in zones that does not utilize revolving doors for entrance/exit. In other words, the function requires granted access at the entrance of the zone for a user to be able to open other doors within the zone:

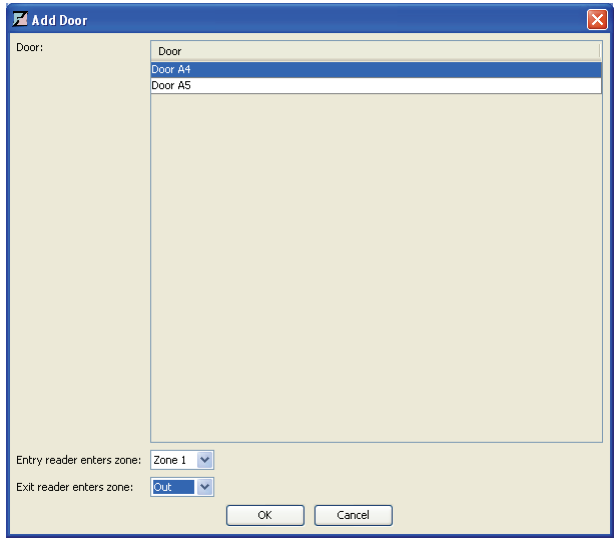
1. An out-zone must be created (if no other zone exists) to activate door block in the anti pass-back zone.



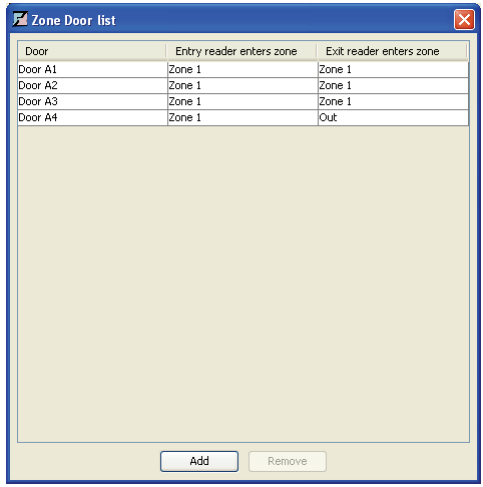
2. For all doors inside the anti pass-back zone with door block, **both** the entry reader and the exit reader must be set to the anti pass-back zone.



3. Finally, add the exit door to the anti pass-back zone. The entry reader is set to the anti pass-back zone. The exit reader is set to *Out* (or another existing zone).



This is the final result:



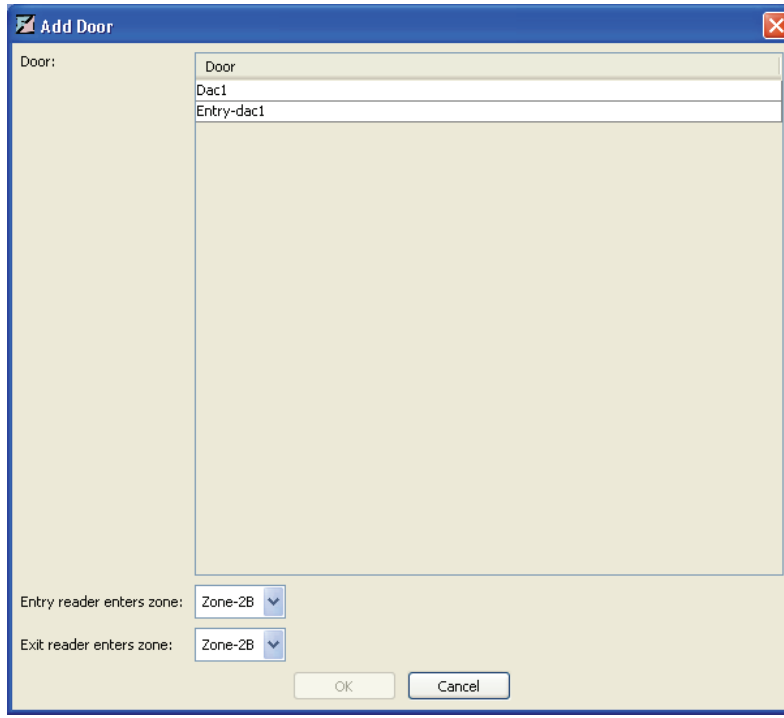
Note! If you have added this functionality, be extra careful when resetting the zone. People that are inside the zone will be locked in, because they can physically not swipe the card at the reader on the entrance of the zone to get access to go through any doors inside the zone.

Add door

With the zone function you can add doors that are linked to zones. A door between two zones is displayed in the *Zone* window as a blue link.

To add a new door, do the following:

1. Select the menu option *Add door* in the Zone window (or right-click on a zone in the map area and choose *Add door*).
2. In the *Add door* window that now opens select a door (DAC) in the list of available doors.
3. Then select from, and to, which zone the door shall be linked. Use the *Entry reader enters zone* and *Exit reader enters zone* drop-down menus in the lower part of the window.

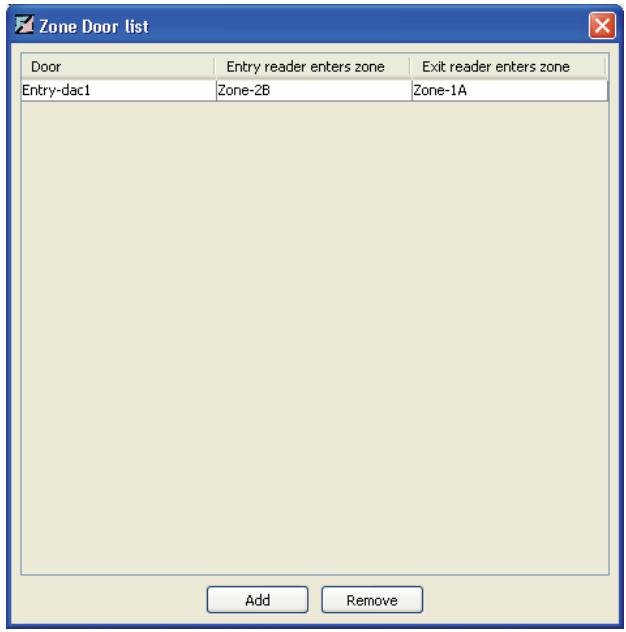


Window Add door

4. Click *OK* if you want to save the change and close the window. Click *Cancel* if you want to close the window and not save the changes.

Zone door list

You can open a overview window displaying zone doors and their links to zones by selecting the *Show doors to zones* button, or by double-clicking on one of the links in the map area.



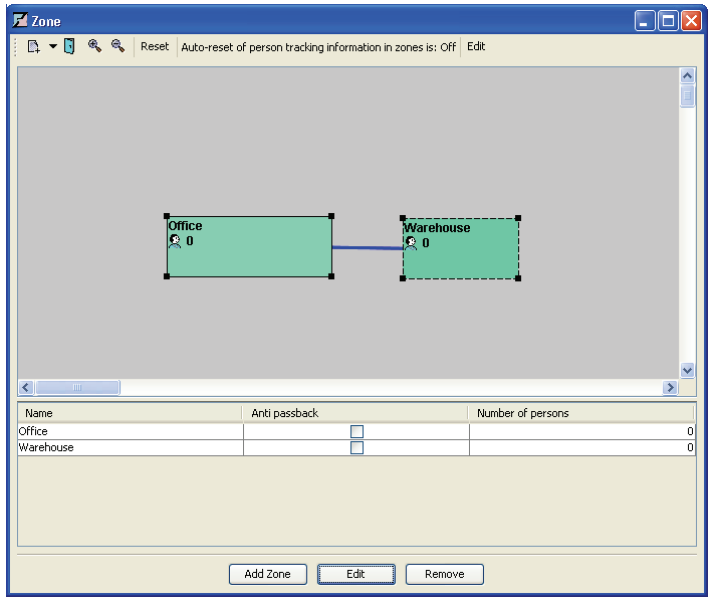
Window Zone door list

Tip! You can access a shortcut to the *Zone door list* by double-clicking on one or several (overlapping) blue links in the map area. In the *Zone door list* window that then opens, only information regarding the selected doors and is shown.

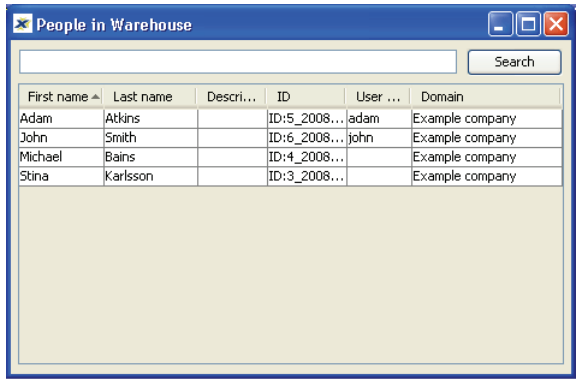
The Fire alarm sounds

The fire alarm for the warehouse is sounding and you want to quickly find out which persons are there.

1. Select *Zone* in the *Tool*-menu.
2. The Zone map is shown; double click on Zone 1 – warehouse.



The Zone window



The window: Persons in zone

Here you can see that there are 3 persons in the warehouse.

Card Reader User Functionality

About this chapter

This chapter is about which functions can be performed at the card reader. This chapter is for the users of the access system.

Buying time

This means that the user is able to extend the amount of time before the office's alarm system starts ringing, for doors that have this operation mode activated.

1. Press A
2. Swipe the card
3. Enter the code

Disarming

Persons with access can activate the alarm for an area via a reader, with an access card and PIN-code:

1. Press B
2. Swipe card
3. Enter PIN-code.

For the galaxy alarm it is also possible to allow a person alarm access for the area to activate the alarm by swiping the card twice.

Arming

Persons with access can deactivate the alarm for a certain area via the reader, with an access card and PIN-code:

1. Press A
2. Swipe card
3. Enter the PIN-code.

For the galaxy alarm it is also possible for a person with alarm access to deactivate the alarm by swiping their card and entering their code – or just swiping the card (and code if the door's current security level schedule demands this).

Add temporary code for door

Users with caretaker access can change the settings of a reader during a limited period so that it works as a code lock with a door code.

The chosen door code stops working when the card's period of validity runs out or when the code lock function is manually turned off from the reader.

A temporary code is activated via the reader by:

1. Press A
2. Swipe card
3. Enter chosen code.

The temporary code is removed via the reader by:

1. Press B
2. Swipe card.

NOTE! If a person has been added with the code for the caretaker function the code is changed to:

To activate a code:

1. Press A
2. Swipe card
3. Remove code

Enter desired code

1. Press B
2. Swipe the card

Set a door unlocked

Press 2A – swipe card – press the number that corresponds to the unlocking time – finish with A. The numbers 1 - 23 correspond to hours and 01 - 059 correspond to minutes.

Example 1: To set a door unlocked for an hour:
Press 2A – swipe card – press 1 – press A.

Example 2: To set a door unlocked for 45 minutes:
Press 2A – swipe card – press 045 – press A.

Example 3: To permanently set a door unlocked:
Press 2A – swipe card – press A.
A buzzer sounds when a door is permanently set unlocked.

NOTE! If a person only is authorized to the door function *Set door unlocked,* the code is changed for the set unlocked function to:
Press A – swipe card – indicate time – press A.

Note! If you made a mistake you can cancel by pressing B (instead of A). If a person only is authorized to the door function *Set door unlocked*, the code is changed for the set unlocked function to:

1. Press A
2. Swipe card

To return to applicable door function schedule:

1. Press B
2. Swipe card.

Cancel unlocking of door

If you want to **cancel** the unlocking of a door:

Press 2B– swipe card, **before** the current door function schedule or set unlocked has passed.

NOTE! If a person has is authorized to the door function, *Set door unlocked*, the code for cancelling is changed to:
Press B – Swipe card.

Lock an unlocked door

If you want to lock a door that is unlocked according to the door function schedule:
Press 3A – swipe card.

To return to the current door function schedule:
Press 3B – swipe card

OBS! If during the input the decision is regretted, it is possible to cancel by finishing the input with B (instead of A).

ARX Server Manager

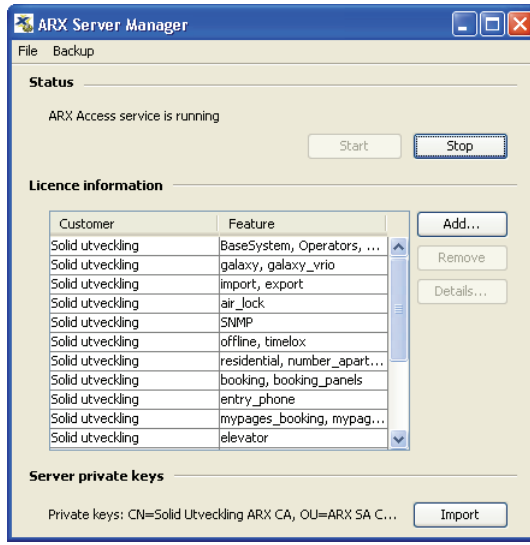
About ARX Server Manager

Before the ARX Client software can run, configure the ARX Server Manager. In the ARX Server Manager you can also control some of the parameters that are needed for the ARX Client software.

In ARX Server Manager all licences and keys are installed. This is also where the database is backed up.

This section goes through step by step how you:

- Install licences
- Install server keys
- Edit system properties
- Back up the database.



Main window for the ARX Server Manager

Installing licences

Licences decide which functions that you have access to in the ARX Client software. Before you can use the ARX Client software you must install the licences. Do the following:

1. Click on *Add...* in the main window
2. Open the licence files (*.alc) that you have. The password is automatically filled in.

Installing private key

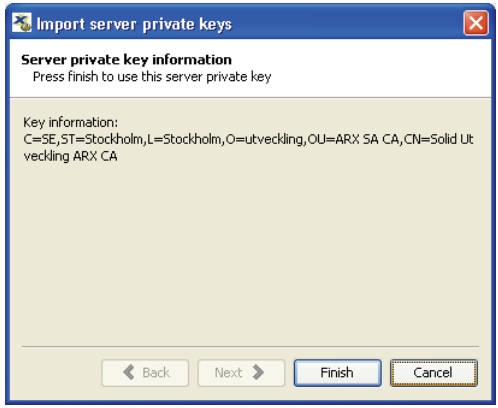
You receive a private key with your purchase of the ARX Access system that shows that you have a valid licence and have the right to use the software. This is how you install your private key:

1. Click on *Import* in the main window. Then click on *Open…* to import your private key.

Import of private key

2. Locate the file that contains your key (*.pfx). Then fill in the password and press *Finish*.

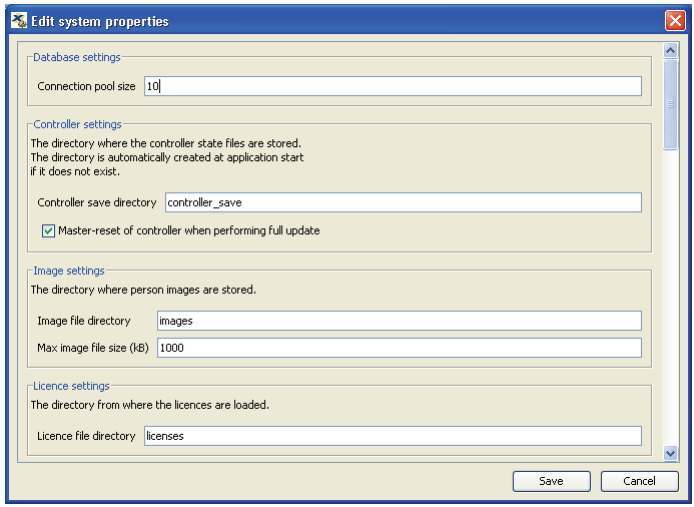
   If you want to see more information about the key before you finalize the import, press on *Next:*



Information about the private key

Change system settings

Select *Change system settings* in the menu in Server manager. Below is a description of possible settings.



Change system settings window

Database settings

This value must NOT be altered.

Controller settings

- **Controller save directory**
  Where the controller synchronisation files are stored
- **Master reset of conrroller when performing full update**
  The controller settings are deleted when performing a full update

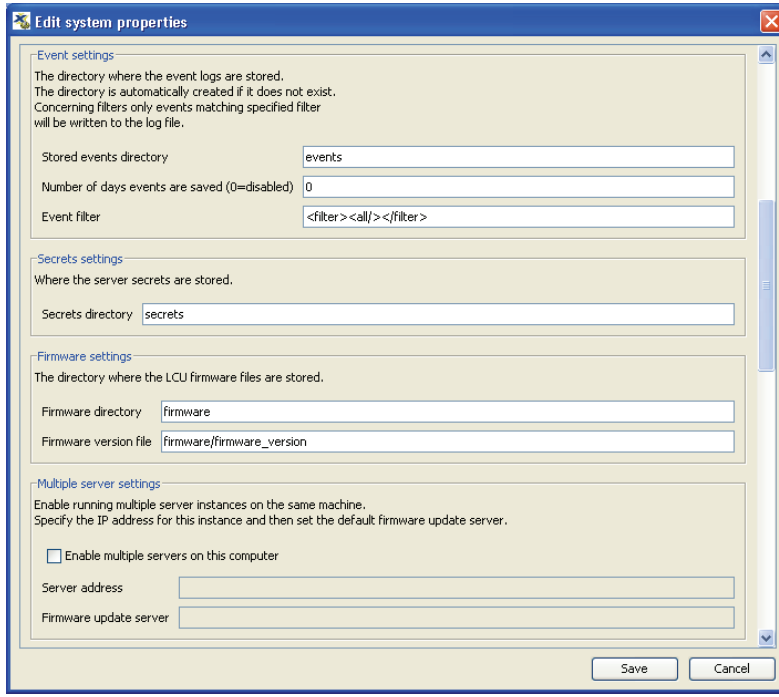
Image settings

- **Image file directory**
  Where the person image files are stored on the server

- **Maximage file size (kB)**
  maximum file size will promt the administrator if the image is too large.

Licence settings

- The name of the folder where the licences are stored in the ARX installation folder.


Edit system properties
Event settings
The directory where the event logs are stored.
The directory is automatically created if it does not exist.
Concerning filters only events matching specified filter
will be written to the log file.
Stored events directory
events
Number of days events are saved (0=disabled)
0
Event filter
<filter><all/></filter>
Secrets settings
Where the server secrets are stored.
Secrets directory
secrets
Firmware settings
The directory where the LCU firmware files are stored.
Firmware directory
firmware
Firmware version file
firmware/firmware_version
Multiple server settings
Enable running multiple server instances on the same machine.
Specify the IP address for this instance and then set the default firmware update server.
Enable multiple servers on this computer
Server address
Firmware update server
Save
Cancel

Change system settings window, continuation

Event settings

- **Stored events directory**
  The name of the folder where all the event logs are stored in the ARX installation folder.

- **Number of days events are saved**
  After this time period the event logs are deleted.
- **Event filter**
  Contact Assa Abloy for more information.

Secrets settings

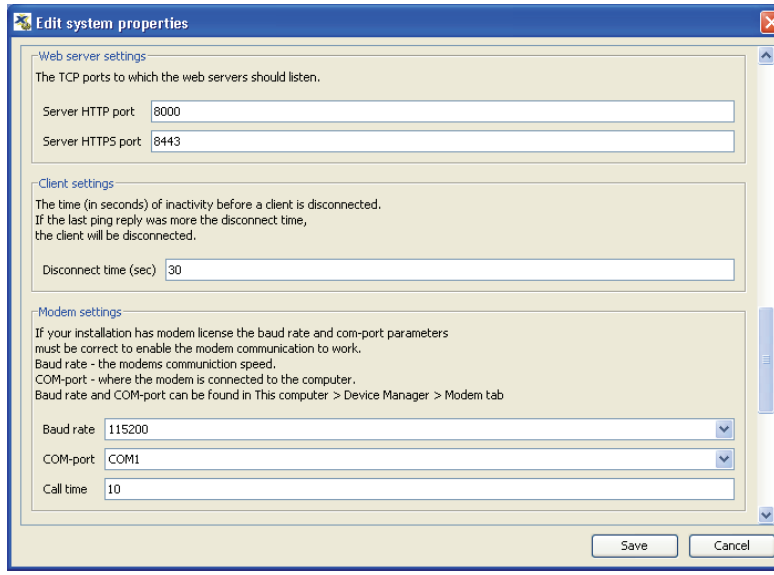
- **Secrets directory**
  Where the private keys are stored in the ARX installation folder. This value must not be changed.

Firmware settings

- **Firmware directory**
  Where the firmware files are stored, in the ARX installation folder.
- **Firmware version file**
  Contact Assa Abloy for more information.

Multiple server settings

By using this option you can run several ARX systems on one server. Contact Assa Abloy for more information.


Edit system properties
Web server settings
The TCP ports to which the web servers should listen.
Server HTTP port
8000
Server HTTPS port
8443
Client settings
The time (in seconds) of inactivity before a client is disconnected.
If the last ping reply was more the disconnect time,
the client will be disconnected.
Disconnect time (sec)
30
Modem settings
If your installation has modem license the baud rate and com-port parameters
must be correct to enable the modem communication to work.
Baud rate - the modems communiction speed.
COM-port - where the modem is connected to the computer.
Baud rate and COM-port can be found in This computer > Device Manager > Modem tab
Baud rate
115200
COM-port
COM1
Call time
10
Save
Cancel

Change system settings window, continuation

Web server settings

- **Server HTTP port**
  The port to which the web server listens to. 8000 is default. If another software is using this port, this value must be changed.
- **Server HTTPS port**
  The port for safe connections to which the web server listens to. 8443 is default. If another software is using this port, this value must be changed.

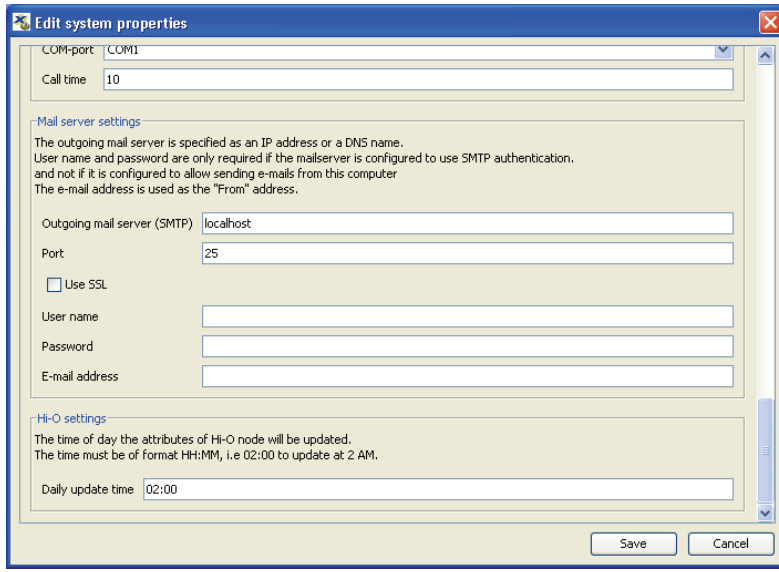
Client settings

- **Disconnect time (sec)**
  The time ARX waits until disconnecting ARX clients that have lost the connection.Default is 30 seconds.

Modem settings (If modem licence is installed)

- **Baud rate**
  The speed the modem works with. Default is 115200 baud.
- **COM-port**
  The communication port the modem is connected to.
- **Call time**
  The time the ARX server waits for respons from hardware connected to the server through modem.

Information of baud rate and COM-port is available in the Device manager in windows.


Edit system properties
COM-port
COM1
Call time
10
Mail server settings
The outgoing mail server is specified as an IP address or a DNS name.
User name and password are only required if the mailserver is configured to use SMTP authentication.
and not if it is configured to allow sending e-mails from this computer
The e-mail address is used as the "From" address.
Outgoing mail server (SMTP)
localhost
Port
25
Use SSL
User name
Password
E-mail address
Hi-O settings
The time of day the attributes of Hi-O node will be updated.
The time must be of format HH:MM, i.e 02:00 to update at 2 AM.
Daily update time
02:00
Save
Cancel

Change system settings window, continuation

Mail server settings

- **Outgoing mail server (SMTP)**
  IP-address or DNS to the outgoing mail server, which enables e-mail to be sent from ARX, for exampel from the Trigger function. Default is localhost.

- **Port**
  The port in the fire wall mail is routed. Default is 25.
- **Use SSL**
  Check this box to use SSL. Then enter username, password and e-mail for the sender for mails from ARX.

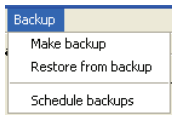
Hi-O settings

- **Daily update time**
  The time when the Hi-O hardware are updated. Default is 02:00.

Safety backup

ASSA recommends regular backup of the ARX database. If the database should become corrupt or the hard drive is broken then it can lead to the whole system needing to be reconfigured.

You have three backup alternatives, make safety backup immediately, schedule the safety backup and the third, and restore the database from a previous safety backup.

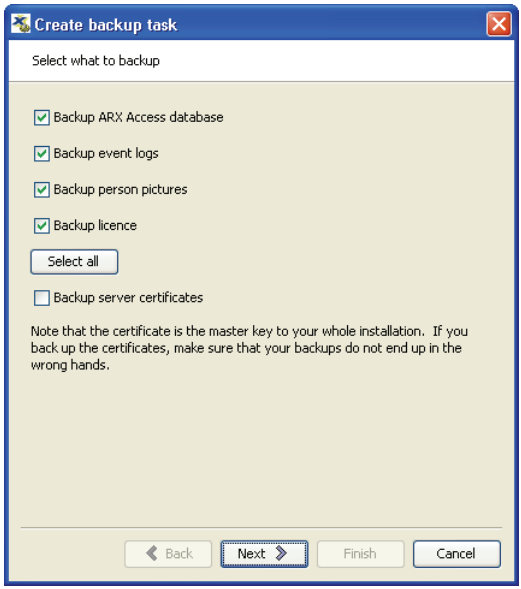


Create safety backup

To make an immediate safety backup of the database do the following:

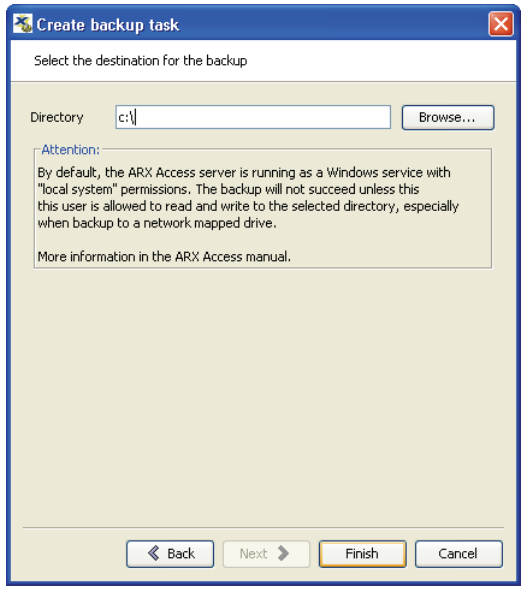
1. Select Safety backup in the main window.
2. Mark the areas that you want to backup:
   ARX database, (all information in the access system), *the event log* (all events in the system), *person pictures* (the

photographs that are kept for every person.), *the licence* and the *private key*. Then press *Next*.


Create backup task
Select what to backup
Backup ARX Access database
Backup event logs
Backup person pictures
Backup licence
Select all
Backup server certificates
Note that the certificate is the master key to your whole installation. If you back up the certificates, make sure that your backups do not end up in the wrong hands.
Back
Next
Finish
Cancel

Main window for Safety backup

3. Then select where the safety backup is to be saved.

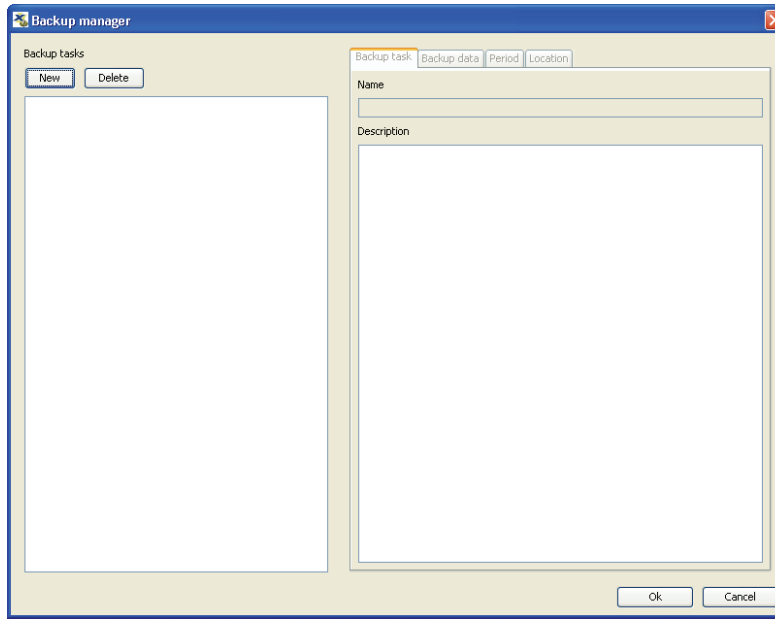

Create backup task
Select the destination for the backup
Directory
c:\
Browse...
Attention:
By default, the ARX Access server is running as a Windows service with "local system" permissions. The backup will not succeed unless this this user is allowed to read and write to the selected directory, especially when backup to a network mapped drive.
More information in the ARX Access manual.
Back
Next
Finish
Cancel

The last step at the safety backup

Scheduling safety backup

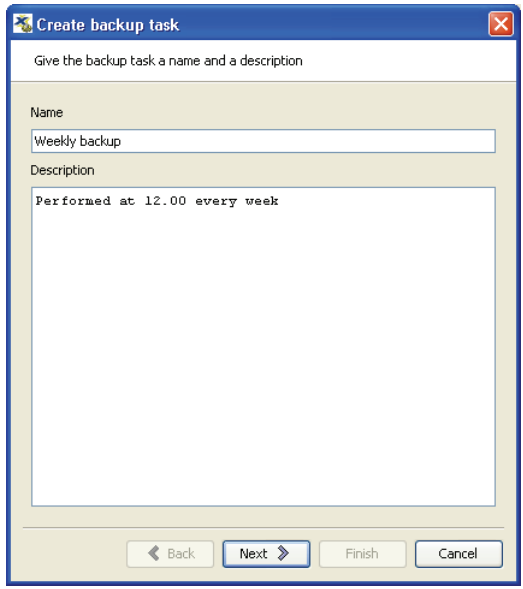
For scheduling the safety backup do the following:

1. Click on *Schedule safety backup* in the menu on the main window.



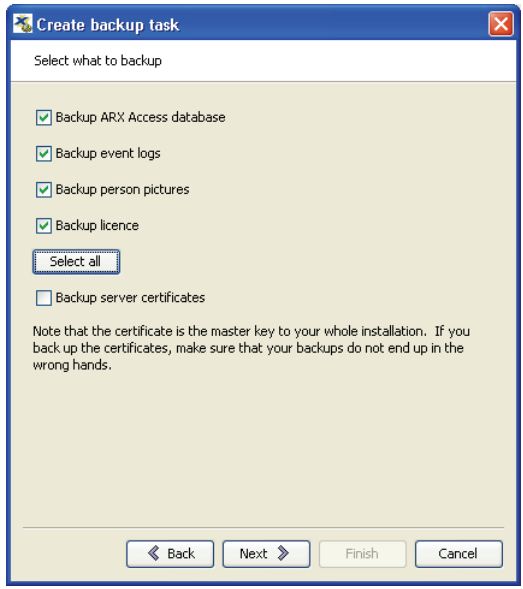
Main window for scheduling the safety backup

2. Click on *New...* to add a new schedule.
3. Enter *Name* and a *Description* (not compulsory) and click on *Next*.



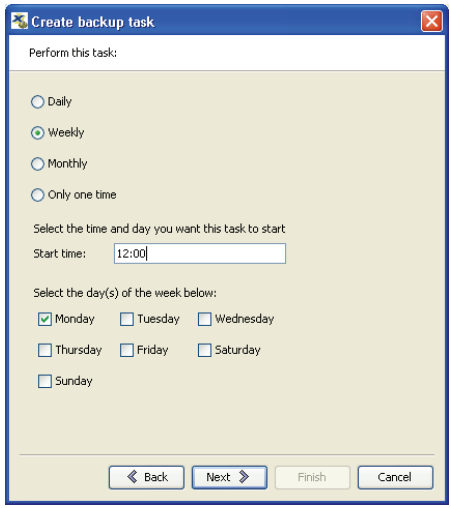
Main window for scheduling the safety backup

4. Select where sections are to be backed up then click on *Next*.


Create backup task
Select what to backup
Backup ARX Access database
Backup event logs
Backup person pictures
Backup licence
Select all
Backup server certificates
Note that the certificate is the master key to your whole installation. If you back up the certificates, make sure that your backups do not end up in the wrong hands.
Back
Next
Finish
Cancel

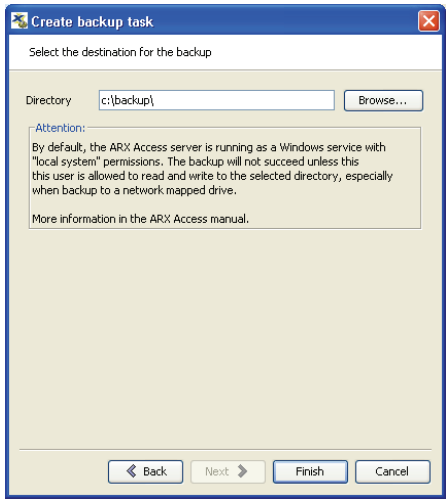
Step 2 for scheduling a safety backup

5. Enter the time interval and at which time that the safety backup should be done. Then click on *Next*.



Step 3 for scheduling a safety backup

6. Select the folder in which the backup is to be saved. Finish by clicking on *Finish*.

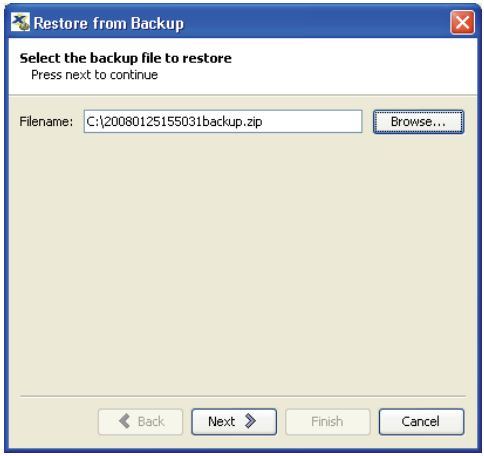

Create backup task
Select the destination for the backup
Directory
c:\backup\
Browse...
Attention:
By default, the ARX Access server is running as a Windows service with "local system" permissions. The backup will not succeed unless this this user is allowed to read and write to the selected directory, especially when backup to a network mapped drive.
More information in the ARX Access manual.
Back
Next
Finish
Cancel

Step 4 for scheduling a safety backup

Restore the backup copy

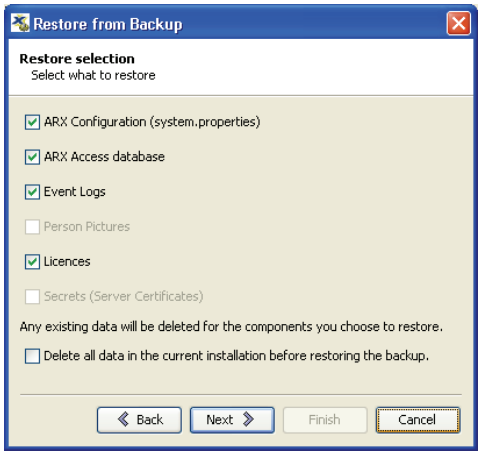
In order to load a safety backup do the following:

1. Click on *Restore the safety backup* in the menu on the main window



The first step for the safety backup

2. Select what you want to restore.



The last step for the safety backup

Appendix

Proposed Workflow for an Installation

Here is a proposal for how the workflow for an installation should look. You are not required to follow this workflow but we believe this will simplify your task in a structured way.

The proposed workflow consists of eleven steps:

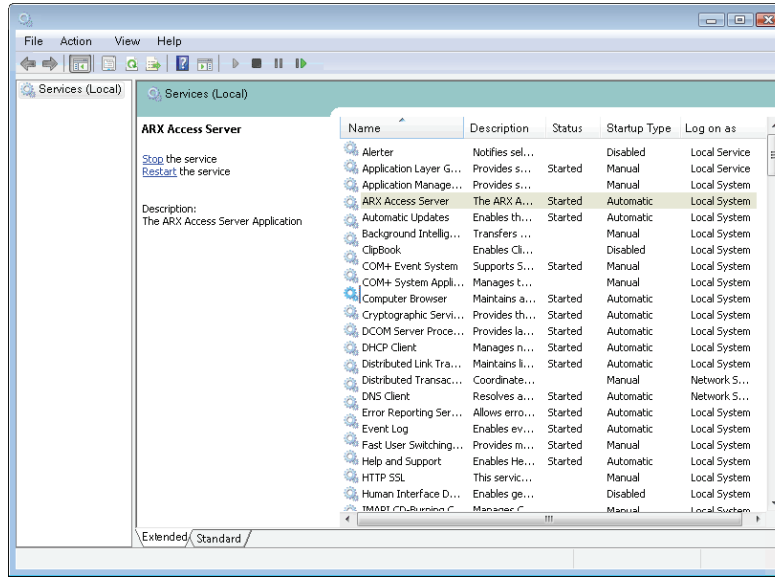
1. **Pre-study**. Plan the installation, use the floor plans for help, think through the domains, areas, groups etc. Study the floor plans for buildings and premises.
2. **Calendar**. Create a calendar (or modify an existing one) and check that the day types are enough (weekday, weekend, etc.)
3. **Schedules**. Create schedules for: accesses, security levels and other process options.
4. **Access categories**. Create access categories, i.e. the groups of users that are to exist.

5. **Card formats**. To be able to use system cards (cards programmed with both system number and a consecutive number), you must add a new card format and enter the valid system number.
6. **Domains.** Find out if the optional feature *Domains* is necessary. It can be useful when creating large access control systems that are geographically spread. The incentive can also be if you want to achieve a decentralized administration of ARX, where local administrators can be given different access to manage their own domain.
7. **Access areas**. Build up the area structure, but wait for the doors.
8. **Installation tree**. Add the different physical units in the installation tree: controllers, DACs and readers (in/out).
9. **Add access categories**. Add access categories in the area tree structure, and attach schedules.
10. **Create door types**. Link security level- and door mode schedules for access areas in the area tree structure.
11. **Doors**. Add doors in the area tree structure.
12. **Extra fields for persons**. Create the extra fields for person details that you need.
13. **Persons**. Enter personal details (Name, ID number, etc.) and link persons to access categories. Link cards till persons.

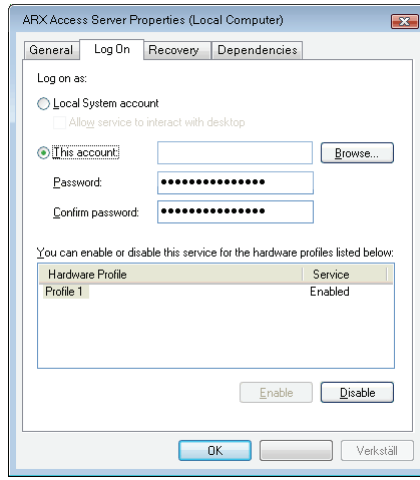
Windows Vista Support

After ARX Access Server installation, the following settings must be made in Windows Vista in order to get ARX server running correctly.

1. Enter *Administrative tools* on the *Control panel*. Open the *Services* application.
2. Highlight *ARX Access server*, right click and choose *Properties*.


File Action View Help
Services (Local)
Services (Local)
ARX Access Server
Stop the service
Restart the service
Description:
The ARX Access Server Application
Name Description Status Startup Type Log on as
Alerter Notifies sel... Disabled Local Service
Application Layer G... Provides s... Started Manual Local Service
Application Manage... Provides s... Manual Local System
ARX Access Server The ARX A... Started Automatic Local System
Automatic Updates Enables th... Started Automatic Local System
Background Intellig... Transfers ... Manual Local System
ClipBook Enables Cli... Disabled Local System
COM+ Event System Supports S... Started Manual Local System
COM+ System Appli... Manages t... Manual Local System
Computer Browser Maintains a... Started Automatic Local System
Cryptographic Servi... Provides th... Started Automatic Local System
DCOM Server Proce... Provides la... Started Automatic Local System
DHCP Client Manages n... Started Automatic Local System
Distributed Link Tra... Maintains li... Started Automatic Local System
Distributed Transac... Coordinate... Manual Network S...
DNS Client Resolves a... Started Automatic Network S...
Error Reporting Ser... Allows erro... Started Automatic Local System
Event Log Enables ev... Started Automatic Local System
Fast User Switching... Provides m... Started Manual Local System
Help and Support Enables He... Started Automatic Local System
HTTP SSL This servic... Manual Local System
Human Interface D... Enables ge... Disabled Local System
Extended Standard

3. Enter the *Log on* tab and check *This account* and enter the credentials for the account (administrative user rights are required) where ARX Access Server is installed.



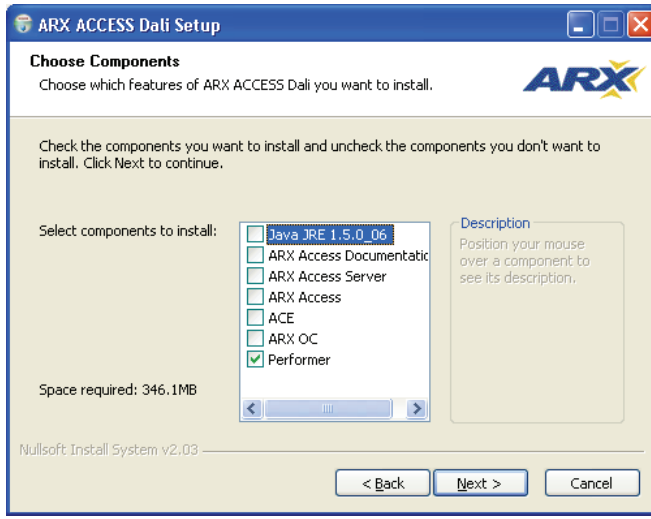
Installation of Performer

To administrate keys the *Performer* application is needed. Be careful to follow these instructions for the installation of Performer and the Performer integration applications.

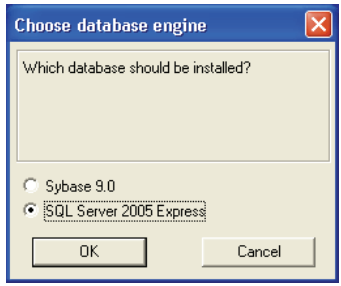
Note! If the installation is not made correctly, problems can occur that can be difficult solve.

For a complete description of the installation procedure and use of the application, please refer to the performer user guide.

1. Open the ARX cd and run *setup.exe*.
   (If a safety warning appears, click *Run*.)
2. Click through a number of dialogs and accept the licence agreement.
3. When the following dialog window appears, select the ”*Performer”* component.

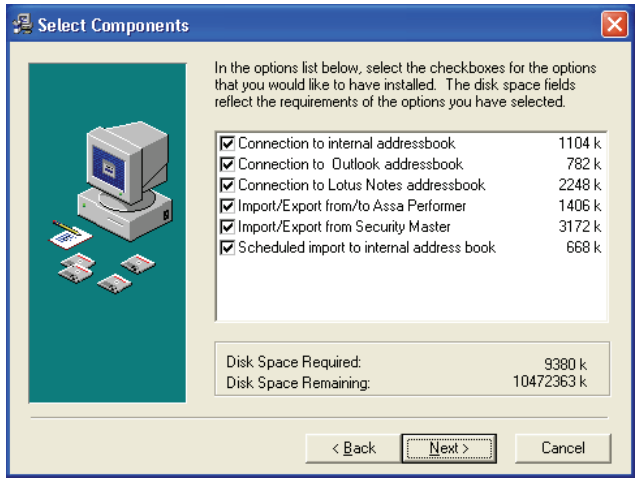

ARX ACCESS Dali Setup
Choose Components
Choose which features of ARX ACCESS Dali you want to install.
ARX
Check the components you want to install and uncheck the components you don't want to install. Click Next to continue.
Select components to install:
Java JRE 1.5.0_06
ARX Access Documentatic
ARX Access Server
ARX Access
ACE
ARX OC
Performer
Description
Position your mouse over a component to see its description.
Space required: 346.1MB
Nullsoft Install System v2.03
< Back
Next >
Cancel

4. Choose install location and start menu folder in the two following dialogs.
5. Then accept the licence agreement.
6. Choose the ”*SQL Server 2005 Express*”.
(Sybase 9.0 does not work with version 2.6.1.40 of Performer.)



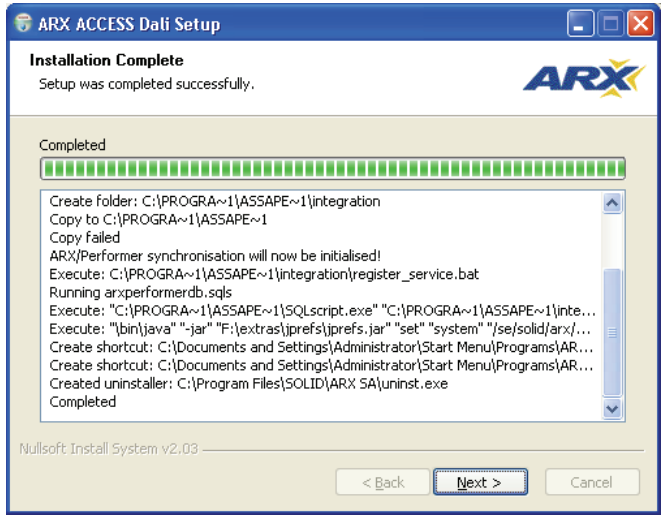
Performer requires the .Net software from Microsoft. If this is not installed on your computer, it will be installed at this stage. After the installation of .Net, you will return to the installation of Performer.

7. Check that all checkboxes are selected in the following dialog. Proceed by pressing ”*Next*”.


Select Components
In the options list below, select the checkboxes for the options that you would like to have installed. The disk space fields reflect the requirements of the options you have selected.
Connection to internal addressbook 1104 k
Connection to Outlook addressbook 782 k
Connection to Lotus Notes addressbook 2248 k
Import/Export from/to Assa Performer 1406 k
Import/Export from Security Master 3172 k
Scheduled import to internal address book 668 k
Disk Space Required: 9380 k
Disk Space Remaining: 10472363 k
< Back
Next >
Cancel

Assa Performer will now be installed.

8. When the installation is completed, click *Next.*

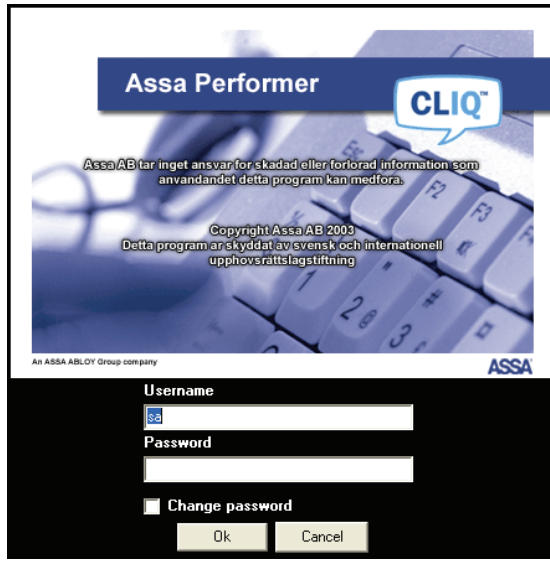


9. Close the installation application by clicking “Finish”.

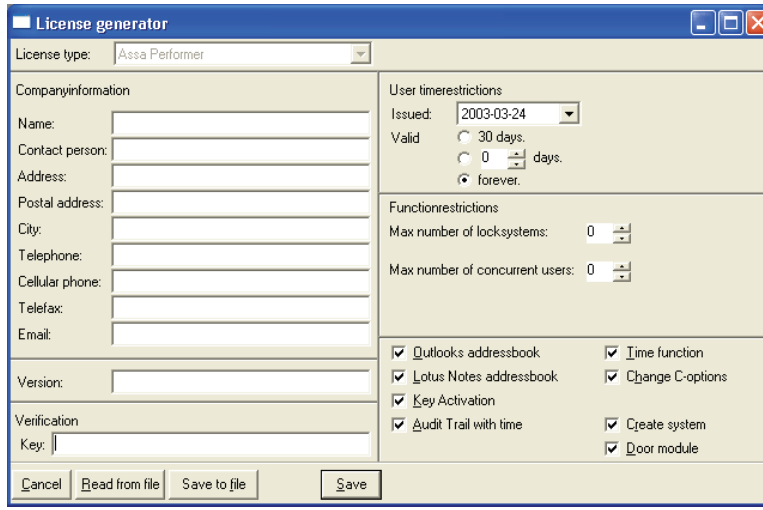
Installation of licence

To be able to run *Assa Performer* you must install as licence. Perform the following steps:

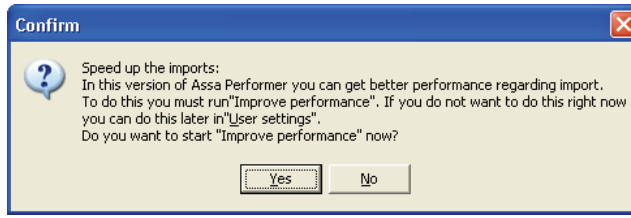
1. Start *Performer* from the Start menu in windows (*Start* > *Program* > *ASSA* > *Performer*). Log in with your username and password.



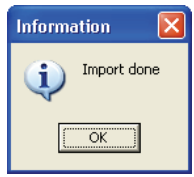
2. The first time *Performer* is started a licence information dialog is displayed. Enter your user credentials or choose "*Read from file*" to read the licence file (.lic-fil).



3. Click “*Save*”.
4. If the following dialog appears, click ”*No*”:


Confirm
Speed up the imports:
In this version of Assa Performer you can get better performance regarding import.
To do this you must run"Improve performance". If you do not want to do this right now you can do this later in"User settings".
Do you want to start "Improve performance" now?
Yes
No

5. Performer starts. Choose “File > Import > Security Master” to import the data base file. The data base file is named *AAA287.bak*.
6. Click “*OK*” if the following dialog appears.



Performer can now be used. Close the application and run the ARX Client software.

See chapter “*Administrate keys (requires the Performer option)” on page 55* to hand out keys and synchronize this information with Performer.

Trouble shooting after installation

- The installation succeeded, but ARX is not able to synchronize with Performer when a key is to be handed out.

Check that the path to Performer is correct and that the data synchronization is running. See chapter “*Performer Integration settings (option)”* on page 60.

- The installation succeeded, but ARX can not find the data base when the key is to be handed out.

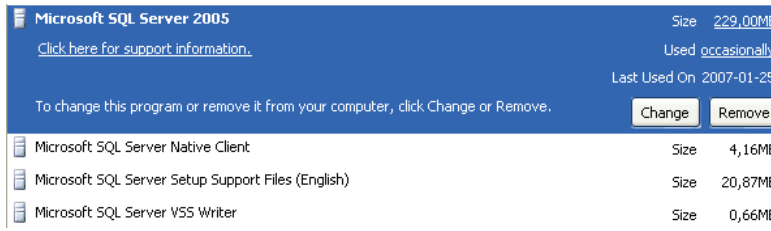
Uninstall Performer and remove the data base that handles the keys, according to below. Then re-install Performer according to previous chapter.

Uninstall Performer

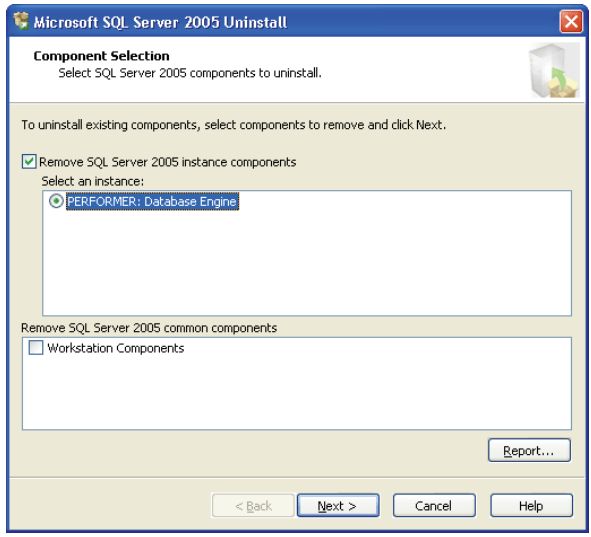
1. Open the control panel in Windows (*Start* > *Settings* > *Control Panel*) and choose *Add and remove Programs*.
2. Find Performer and choose click *Remove.*

Apart from removing the *Assa Performer*, un-installation also requires removal of the data base that handles the key information in SQL Server:

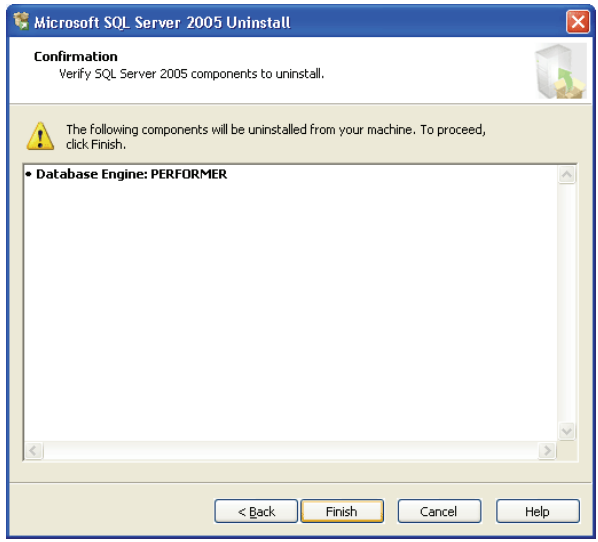
3. Open the Control panel in Windows (*Start* > *Settings* > *Control panel*) and choose *Add and remove Programs*.
4. Find Microsoft SQL Server 2005 and choose *Remove.*


Microsoft SQL Server 2005
Size 229,00MB
Click here for support information.
Used occasionally
Last Used On 2007-01-25
To change this program or remove it from your computer, click Change or Remove.
Change
Remove
Microsoft SQL Server Native Client
Size 4,16MB
Microsoft SQL Server Setup Support Files (English)
Size 20,87MB
Microsoft SQL Server VSS Writer
Size 0,66MB

5. Highlight ”*PERFORMER: Database Engine”* and click *next*.


Microsoft SQL Server 2005 Uninstall
Component Selection
Select SQL Server 2005 components to uninstall.
To uninstall existing components, select components to remove and click Next.
Remove SQL Server 2005 instance components
Select an instance:
PERFORMER: Database Engine
Remove SQL Server 2005 common components
Workstation Components
Report...
< Back
Next >
Cancel
Help

6. Verify your choice by clicking *Finish*.



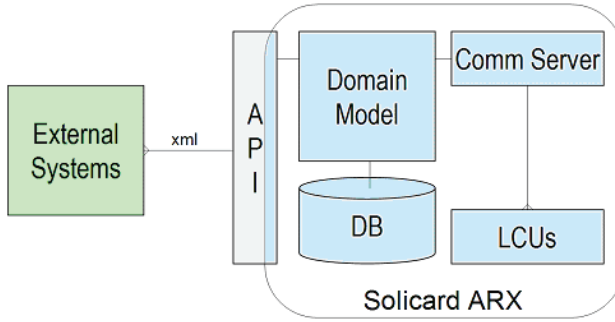
To un-install SQL Server, select ”Workstation components” in step 5 above.

Import and Export in ARX

You can import and export data to and from ARX. This feature requires that you have a sufficient licence that includes import and export.

The purpose with the import- and export function is to make it possible to synchronise data between ARX and one or more external systems. These systems can for example be other access control systems, personnel databases, time reporting systems etc.

To be able to match information in a system with equivalent information in another system, it is necessary that some data shares the same specification in the different systems (for example access categories, card format and extra field). It is also necessary that persons and access cards contain unique identifiers (id, card number + card format) that are identical in the different systems.



Information flow

For additional information regarding the import and export functions, please contact Assa for additional information.

HTTP Access in ARX

There are a number of functions in ARX that can be accessed via HTTP. Apart from import and export these functions are :

- Event logs
- Door modes

Event logs

The event logs in the system can be accessed using HTTP. There are two modes by which the information can be retrieved: historical and real time. Historical access retrieves events that have occurred in the past while real time retrieves events as they happen.

Additionally it is possible to specify a number of request parameters that control the log period, number of events and filters.

For additional information regarding HTTP access, please contact Assa for additional information.

Door Modes

The doors in the system can be controlled by sending HTTP requests to the built-in web server. The following operations can be performed:

- *Pulse open*, the door is temporarily opened.
- *Force open*, the door is unlocked regardless of other configuration options.
- *Force close*, the door is locked regardless of all other configuration options other than the above mentioned *Force open* command.

For additional information regarding HTTP access, please contact Assa for additional information.

Licensing Information

This product contains software licensed under the GNU General Public Licence and the GNU Library General Public Licence. The sources to this software can be found on the accompanying CD.

This product includes software developed by the Apache Software Foundation (http://www.apache.org/).

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (http://www.openssl.org/)

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)

This product includes cryptographic software from PuTTY (http://www.chiark.greenend.org.uk/~sgtatham/putty/).

This product includes software written by Graham Mainwaring (graham@mhn.org).

This product includes Suns Java 2 Runtime Environment (J2RE), Standard Edition which is subject to the following licences:

This product includes code licensed from RSA Security, Inc.

Some portions licensed from IBM are available at http://oss.software.ibm.com/icu4j/.

(For more information on licences, see the ARX installation CD.)

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